

FINAL ENVIRONMENTAL ASSESSMENT

TAR CREEK DEMONSTRATION PLAN FOR LAND RECLAMATION AT THE EAST KENOYER SITE PICHER, OKLAHOMA




**US Army Corps
Of Engineers
Tulsa District**

APRIL 2005

FINDING OF NO SIGNIFICANT IMPACT

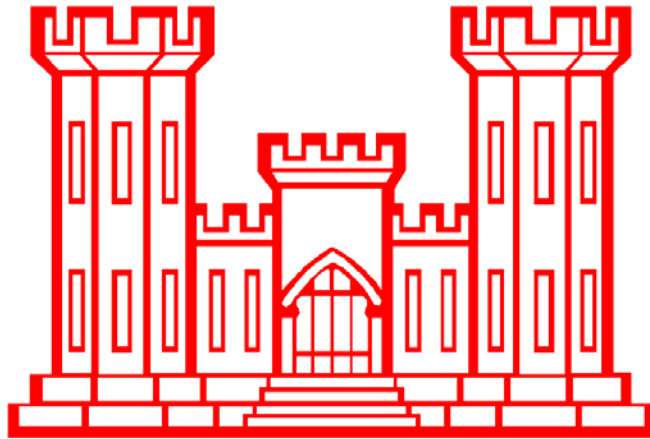
In accordance with the National Environmental Policy Act of 1969, including guidelines in 33 Code of Federal Regulations, Part 230, the Tulsa District has assessed the environmental impact of a demonstration project on property designated as the East Kenoyer Site owned by the City of Picher, Oklahoma. The project is designed to reduce sedimentation into Tar Creek from the adjacent chat piles, reduce the direct exposure of humans and wildlife to mine waste, improve water quality standards, increase the aesthetic value, and increase the post-mining usefulness of the reclaimed area. The East Kenoyer Site is within the boundary of the Tar Creek Superfund Site in Ottawa County, Oklahoma. The Corps of Engineers has been given the authority under Section 111, Energy and Water Development Appropriations Act of 2004 (PL 108-137) to implement demonstration projects determined by the Secretary of the Army to be necessary to address lead exposure and other environmental problems related to historical mining activities in Ottawa County. This assessment was prepared in accordance with U.S. Army Corps of Engineers Regulations, Part 230, Policy and Procedures for Implementing the National Environmental Policy Act. It has been determined from the enclosed Environmental Assessment that the project will have no significant adverse effects on the natural or human environment. Therefore, an environmental impact statement will not be prepared.

9 APR 05
Date


Miroslav P. Kurka
Colonel, U.S. Army
District Engineer

Enclosure
Environmental Assessment

**Final Environmental Assessment
Tar Creek Demonstration Plan for Land Reclamation
at the East Kenoyer Site
Picher, Ottawa County, Oklahoma**



**U.S. Army Corps of Engineers
Southwestern Division
Tulsa District**

April 2005

ENVIRONMENTAL ASSESSMENT ORGANIZATION

This Environmental Assessment (EA) evaluates the effects of a demonstration project in the Tar Creek Superfund Site designed to reduce sedimentation into Tar Creek from the adjacent chat piles, reduce the direct exposure of humans and wildlife to mine waste, improve water quality standards, increase the aesthetic value, and increase the post-mining usefulness of the reclaimed area. This EA will facilitate the decision process regarding the proposed action and alternatives.

<i>SECTION 1</i>	<i>AUTHORITY, PURPOSE, AND SCOPE</i> provides the authority for the proposed action, summarizes the project purpose, provides relevant background information, and describes the scope of the EA.						
<i>SECTION 2</i>	<i>ALTERNATIVES</i> examines alternatives for implementing the proposed action.						
<i>SECTION 3</i>	<i>PROPOSED ACTION</i> describes the recommended action.						
<i>SECTION 4</i>	<i>AFFECTED ENVIRONMENT</i> describes the existing environmental and socioeconomic setting.						
<i>SECTION 5</i>	<i>ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION</i> identifies the potential environmental and socioeconomic effects of implementing the proposed action and alternatives.						
<i>SECTION 6</i>	<i>RESTORATION PLAN</i> summarizes mitigation actions required to enable a Finding of No Significant Impact for the proposed alternative.						
<i>SECTION 7</i>	<i>FEDERAL, STATE, AND LOCAL AGENCY COORDINATION</i> provides a listing of individuals and agencies to which a notice of availability of the FONSI will be sent.						
<i>SECTION 8</i>	<i>REFERENCES</i> provides bibliographical information for cited sources.						
<i>SECTION 9</i>	<i>APPLICABLE ENVIRONMENTAL LAWS AND REGULATIONS</i> provides a listing of environmental protection statutes and other environmental requirements.						
<i>SECTION 10</i>	<i>LIST OF PREPARERS</i> identifies persons who prepared the document and their areas of expertise.						
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**Final Environmental Assessment
Tar Creek Demonstration Plan for
Land Reclamation at the East Kenoyer Site
Picher, Oklahoma**

SECTION 1.0 AUTHORITY, PURPOSE, AND SCOPE

This study is being conducted under authority of Section 111 of the Energy and Water Development Appropriations Act of 2004 (Public Law 108-137). The Corps of Engineers has been given authority under this Act to implement demonstration projects determined by the Secretary of the Army to be necessary to address lead exposure and other environmental problems related to historical mining activities in Ottawa County, Oklahoma. This demonstration project was designed following the objectives of the Land Remediation and Restoration section of the Oklahoma Plan for Tar Creek. The purpose of this assessment is to evaluate whether this project would have a significant effect on the natural and human environment near Picher, Ottawa County, Oklahoma (Figure 1.0).

The National Environmental Policy Act (NEPA) of 1969 (Public Law 91-190) requires all Federal agencies to address the environmental impacts of any major Federal action on the natural and human environment. Guidance for complying with the NEPA is contained in Title 40 of the Code of Federal Regulations (CFR), Parts 1500 through 1508, and in Engineering Regulation (ER) 200-2-2, *Procedures for Implementing NEPA*. This environmental assessment was developed to assure that the proposed project complies with the intent of NEPA.

SECTION 2.0 ALTERNATIVES

Alternatives include a No Action plan, which would retain existing conditions; and a Proposed Action plan, which would demonstrate the effectiveness of reclamation of abandoned mine workings to show how it could be used along the entire stretch of Tar Creek through the mined areas.

2.1 No Action Plan

The Council on Environmental Quality (CEQ) regulations implementing the provisions of the National Environmental Policy Act of 1969 (NEPA) require Federal agencies to consider a "no action" alternative. These regulations define the "no action" alternative as the continuation of existing conditions and their effects on the environment, without implementation of, or in lieu of, a proposed action. This alternative represents the existing condition and serves as the baseline against which to compare the effects of the proposed alternative. The no action alternative would retain the existing condition and would not result in any project-related environmental impacts or loss of habitat. The negative health and environmental effects of abandoned mine workings would remain including residual fine and coarse mine waste, large and small chat piles, waste rock piles, extensive chat bases, and mill ponds. The site is hazardous and health and safety would continue to be of concern including the exposure of lead dust.

2.2 Action Alternative

Only one alternative to the No Action Plan was considered and proposed under this project. That alternative is a demonstration project to reclaim approximately 29 acres of the East Kenoyer property owned by the City of Picher. The Proposed Action is addressed in Section 3.0.

SECTION 3.0 PROPOSED ACTION

The proposed action is a demonstration project being implemented to address lead exposure and other environmental problems related to historical mining activities on property designated as the East Kenoyer Site. The East Kenoyer Site is owned by the City of Picher and is within the boundary of the Tar Creek Superfund Site.

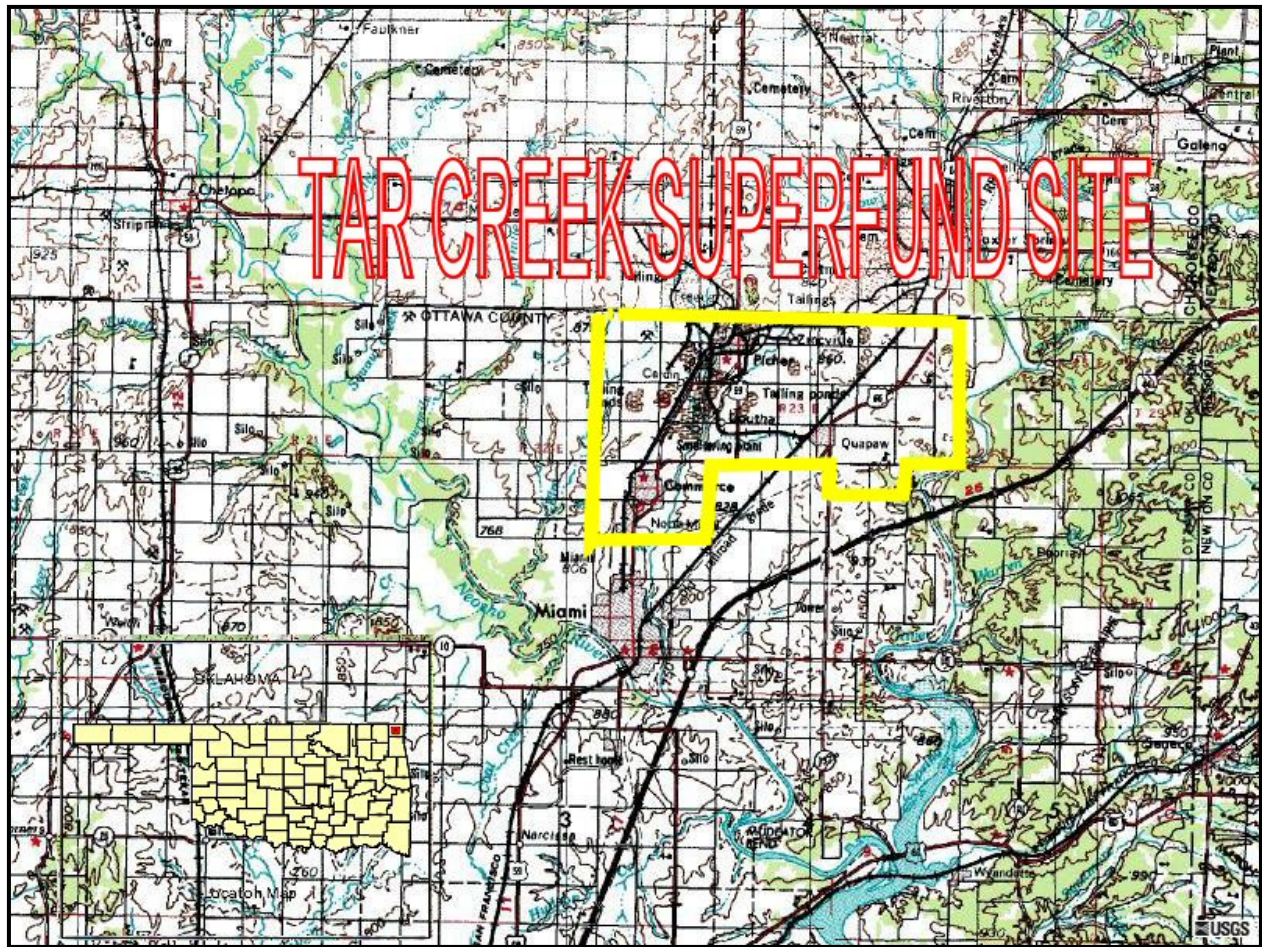


Figure 1.0 Vicinity Map.

The project is designed to reduce sedimentation into Tar Creek from the adjacent chat piles, reduce the direct exposure of humans and wildlife to mine waste, improve water quality standards, increase the aesthetic value, and increase the post-mining usefulness of the reclaimed area. It is also designed to restore the site to a condition that is similar to the surrounding landform and topography. All areas that are disturbed by this project will be worked such that: 1) there is no visible mining waste, 2) the soil left shall conform to EPA 40 CFR Part 745 average concentration of lead in soil (1200 ppm), 3) there is thriving vegetative cover on the site, and 4) the site matches existing topography and vegetation in the surrounding area. Concrete rubble and debris will be removed but the concrete foundations and pillars related to mining activities will be left in place undisturbed because of their cultural resources value. Several methods will be used by the contractor to remediate the site.

Work will be accomplished according to all local, State, and Federal regulations. Adequate and appropriate safety will be a major consideration during all phases of the project.

3.1 Fugitive Dust

The project is designed to permanently control and reduce fugitive dusts derived from chat bases, chat, chat piles, millpond and any mine wastes present at the site. Remediation measures should also permanently control and eliminate mining related wastes from entering Tar Creek. Fugitive dusts contributed from the site during construction activities and after construction is complete shall not exceed the EPA national primary and secondary ambient air quality standards for PM 10 and particulate matter and lead. The contractor will follow a fugitive dust control plan and provide for self monitoring of fugitive dusts during the construction phase of the project.

3.2 Chat Re-grading and Amendment

A soil/chat mixture will be used to limit the volume and cost of borrow material needed to establish vegetative cover. Clean soil from a pre-tested source will be hauled onto the site and mixed in place with chat that remains on the surface. Grading and drainage will be accomplished to provide a topography that will convey water off the site during a 25-year, 24-hour storm event without developing areas of ponding. Amendment of the remaining chat at the surface will result in a soil mixture that will support vegetation and that will have a total lead concentration below 1,200 parts per million (ppm).

In addition to cost savings, an added advantage to the Government of this approach would be a demonstration of the efficacy of mixed soil/chat surface material for remediation of future sites.

3.3 Chat Injection

Several bore holes will be drilled into the mine caverns to investigate the availability of cavern volumes for chat injection. Issues that will be addressed by the bore holes include: availability of open mine caverns, impact of chat on water quality, and volume of chat that would be eliminated. In order to inject chat three 8-inch diameter injection borings will be drilled into the mine caverns. It is currently estimated that about 6,000 yd³ of chat can be injected. Experience from the EPA chat injection pilot study indicates that 1,000 to 4,000 yd³ of chat can be injected through one boring drilled into an open mine cavern 20 feet high. Typical injection rates using a "water-assisted" placement approach are in the range of 100 or more cubic yards per hour at a per yd³ cost of \$10.00 to \$20.00.

The advantage to this method is control of human residential exposure to chat by eliminating substantial volumes of surface chat from the site, an overall goal of the Oklahoma Plan.

3.4 Chat Hauling Off-site

The volume of chat that can be efficiently injected into the open mine caverns at the site will probably be minimal in comparison to the total volume of chat that needs to be removed to remediate the site. Therefore, a substantial volume of chat will be hauled off-site. Approximately 20,000 yd³ will be hauled off-site.

Teeter's Asphalt, located just south of site, has agreed to accept the bulk of the material for reuse as asphalt aggregate. The southern access road, controlled by Flint Rock, will be used as a haul road to limit the use of public roadways and residential exposure during movement of the material. Tandem axle dump trucks will be used to transport the material over the haul road.

Advantages to the Government of hauling chat off-site to Teeter's Asphalt will be both in limiting the volume of chat remaining on-site and in the beneficial use of chat material.

3.5 Grading and Covering Chat

Chat amendment will not be practicable over some of the site. Approximately 37,000 yd³ of chat will remain on the site. About 17,000 yd³ of this remaining chat will be used to fill two ponds on the property and to provide material to construct adequate drainage of the site. This chat will be capped with an 8-inch (loose) layer of approved off-site borrow material spread on the surface to provide a suitable medium for supporting vegetation and to eliminate direct human and surface water exposure to mine waste and dust.

The advantage to the Government of leaving chat on-site and covering it with an 8-inch layer of soil is reduced cost.

SECTION 4.0 AFFECTED ENVIRONMENT

The East Kenoyer Demonstration Site is located on about 29 acres of land within the City of Picher, Oklahoma. It is owned by the City and is situated on the western side of Picher just southwest of the High School. The site is a component of the 40 square-mile Tar Creek Superfund Site. The Tar Creek Superfund Site was listed

on the EPA National Priorities List in 1983. In 1993 the Tar Creek Superfund Site was moved to the top of the National Priorities List, making it the highest-ranking Superfund site in the nation. The Tar Creek site encompasses the Oklahoma portion of the Tri-State Mining District of northeastern Oklahoma, southeastern Kansas, and southwestern Missouri. It includes communities in Ottawa County outside the mining area that are also contaminated with mining waste. The towns of Picher, Cardin, Commerce, North Miami, and Quapaw are part of the Tar Creek Superfund Site.

The mining and milling of lead and zinc ore left approximately 300 miles of underground tunnels, millions of tons of tailings (generally the tailings with the consistency of gravel are called chat), more than 1,320 mine shafts, and thousands of drill holes in Oklahoma's part of the Tri-State Mining District. The mine tailings are deposited in hundreds of piles and in sediment retention ponds near the residential communities and in undeveloped urban and rural areas. Some piles are as high as 200 feet and contain lead and other heavy metals.

Ottawa County has a temperate, continental climate characteristic of the southern prairie plains where they merge with the southwestern extension of the Ozark Plateau. The elevation in the Picher area is around 800 feet National Geodetic Vertical Datum.

Changes between the seasons are gradual, but the characteristics of the seasons are fairly well defined. The winter season ranges from cold to moderate; there are many sunny days between storms. Snow rarely covers the ground for more than 3 or 4 days at a time. Spring is the season when the weather is most variable and when the largest amount of rainfall of high intensity occurs. Summers are generally hot, but the nights are cool. In the fall there are long periods of pleasant days interspersed with spells of moderate to heavy rains. Tornadoes are infrequent but can occur in the area.

The average annual temperature is 57.3 ° F. Temperatures range on the average from 33° in January to 79.4° in July. The average annual precipitation is 44.6 inches. About 31 percent of the precipitation comes in spring; 29 percent in summer; 26 percent in fall; and 14 percent in winter. Winds are generally from the south, but in midwinter northerly winds predominate. The average annual snowfall is about 12 inches and covers the ground with at least two inches an average of 13 days per year.

4.1 Social and Economic Conditions

Lead and zinc mining came to northeastern Oklahoma near Peoria, Ottawa County, in 1891. At one time the Tri-State Mining District, which includes the Picher Mining Field, was the leading United States producer of lead and zinc, supplying nearly 27 percent on the nations lead and zinc products. During the peak mining years of 1907 through 1946, almost two million tons of lead and zinc were mined in the area at a value of more than \$202 million. By the time the last mining company closed in 1970, the Picher Mining Field had produced 1.7 million tons of lead and 8.8 million tons of zinc.

But what once brought economic prosperity to the far northeastern corner of Oklahoma soon led to a legacy of human health and environmental calamity. The mining and milling of lead and zinc ore left approximately 300 miles of underground tunnels, 165 million tons of tailings (chat), over 1,320 mine shafts, and thousands of drill holes in the Oklahoma portion of the Tri-State Mining District alone. Tangible natural resource threats were first realized in 1979 when metals-laden mine water began discharging to surface streams in the Tar Creek watershed. The 40 square-mile site was added to the first National Priorities List when Congress created the Superfund program in 1983, and remediation efforts followed primarily to address the mine water discharges.

In an effort to assume a more vital leadership role in attacking the myriad environmental, health, and safety problems associated with the nation's highest-ranking Superfund site, Oklahoma Governor Frank Keating formed the Tar Creek Superfund Task Force on January 26, 2000 which was charged with developing a comprehensive remediation plan for the area.

U.S. Census Bureau data from the 2000 Census indicates that an estimated 1,640 persons live in Picher, Oklahoma, and an estimated 33,194 persons live in Ottawa County, Oklahoma. The racial makeup of the City of Picher is 77.13% Caucasian, 13.78% Native American, 1.4% Hispanic, 0.18% Pacific Islander, 0.12% Asian, and 8.78% from mixed races. The racial makeup of Ottawa County is 74.1% Caucasian, 16.5% Native American, 3.2%

Hispanic, 0.6% African American, 0.3% Asian, 0.1% Pacific Islander, 1.5% from other races, and 3.8% from two or more races.

According to the 2000 Census approximately 616 people are in the labor force in Picher and 15,110 people in Ottawa County. Almost half the workforce of Picher is employed in either the manufacturing industry or in the educational, health, and social services industry. An additional 20.9% of the workforce is employed in the retail trade industry and the construction industry. In Ottawa County persons working in the educational, health, and social services make up 23.9% of the workforce. An additional 17.7% of the workforce is employed in the manufacturing industry while arts, entertainment, recreation, accommodation, food services and retail trade make up 20.8%.

The median household income in the 2000 Census was \$19,722 for Picher, and \$27,507 for Ottawa County. The State of Oklahoma median household income for that year was \$33,400. The per capita income for Picher was \$10,938; for Ottawa County was \$14,478; and for the State of Oklahoma was \$17,646.

4.2 Executive Order 12898

Executive Order 12898 requires each Federal agency to make environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.

Under NEPA, the identification of a disproportionately high and adverse human health or environmental effect on a low-income population, minority population, or Indian tribe does not preclude a proposed agency action from going forward, nor does it necessarily compel a conclusion that a proposed action is environmentally unsatisfactory. Rather, the identification of such an effect serves to heighten agency attention to alternatives (including alternative sites), mitigation strategies, monitoring needs, and preferences expressed by the affected community or population.

Low-income populations in an affected area are identified with the annual statistical poverty thresholds from the Bureau of the Census Reports on Income and Poverty. In identifying low-income populations, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect.

Minorities are comprised of individual(s) who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic.

Minority populations are identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. In identifying minority communities, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a geographically dispersed/transient set of individuals (such as migrant workers or Native American), where either type of group experiences common conditions of environmental exposure or effect. The selection of the appropriate unit of geographic analysis may be a governing body's jurisdiction, a neighborhood, census tract, or other similar unit that is to be chosen so as to not artificially dilute or inflate the affected minority population. A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds.

Disproportionately high and adverse human health effects: When determining whether human health effects are disproportionately high and adverse, agencies are to consider the following three factors to the extent practicable: (a) Whether the health effects, which may be measured in risks and rates, are significant or above generally accepted norms. Adverse health effects may include bodily impairment, infirmity, illness, or death; and (b) Whether the risk or rate of hazard exposure by a minority population, low-income population, or Indian tribe to an environmental hazard is significant and appreciably exceeds or is likely to appreciably exceed the risk or rate to the general population or other appropriate comparison group; and (c) Whether health effects occur in a minority

population, low-income population, or Indian tribe affected by cumulative or multiple adverse exposures from environmental hazards.

Disproportionately high and adverse environmental effects: When determining whether environmental effects are disproportionately high and adverse, agencies are to consider the following three factors to the extent practicable: (a) Whether there is or will be an impact on the natural or physical environment that significantly and adversely affects a minority population, low-income population, or Indian tribe. Such effects may include ecological, cultural, human health, economic, or social impacts on minority communities, low-income communities, or Indian tribes when those impacts are interrelated to impacts on the natural or physical environment; and (b) Whether environmental effects are significant and are or may be having an adverse impact on minority populations, low income populations, or Indian tribes that appreciably exceeds or is likely to appreciably exceed those on the general population or other appropriate comparison group; and (c) Whether the environmental effects occur or would occur in a minority population, low-income population, or Indian tribe affected by cumulative or multiple adverse exposures from environmental hazards.

4.3 Executive Order 13045

On 21 April 1997, President Clinton issued Executive Order 13045 (EO 13045), Protection of Children From Environmental Health Risks and Safety Risks, which notes that children often suffer disproportionately from environmental health and safety risks, due in part to a child's size and maturing bodily systems. The executive order defines environmental health and safety risks as risks to health or to safety that are attributable to products or substances that the child is likely to come in contact with or ingest (such as the air we breathe, the food we eat, the water we drink or use for recreation, the soil we live on, and the products we use or are exposed to). Executive Order 13045 requires Federal agencies, to the extent permitted by law and mission, to identify and assess environmental health and safety risks that may affect children disproportionately. The Order further requires Federal agencies to ensure that its policies, programs, activities, and standards address these disproportionate risks. Executive Order 13045 is addressed in this NEPA document to examine the effects this action will have on children.

4.4 Natural Resources

4.4.1 Terrestrial

The eastern part of the Oklahoma portion of the Picher Field is situated on the west edge of the Ozark Plateau Physiographic Province. The Ozark Plateau is a broad, low structural dome lying mainly in southern Missouri and northern Arkansas. However, the main part of the Picher Field is within the Central Lowland Physiographic Province. This province is characterized by a nearly flat, treeless prairie underlain by Pennsylvanian shales.

The rock formations exposed at the surface in the mining field include Mississippian and Pennsylvanian units that are nearly flat, with a low regional northwestward dip of about 20-25 feet per mile. Cambrian and Ordovician formations, primarily dolomite and chert with some sandstone and minor shale, are encountered only in deep drill holes and water wells in this area.

Mississippian rock units, principally the Boone Formation, are the host for most of the ore deposits. The Boone Formation is composed of fossiliferous limestone and thick beds of nodular chert. Significant quantities of mill-waste material were generated by milling of the lead-zinc ores. The discarded mill-waste material, chiefly composed of chert fragments 0.75 inches or less in diameter is referred to as chat. An inventory of tailings piles, former tailings piles, and former tailings ponds indicates there are 146 former chat-pile sites and 119 existing chat piles that occupy about 1,200 acres. Approximately 900 acres are overlain by chat piles. There are approximately 75 million tons of chat piled throughout the Tar Creek Superfund Site.

The streams that traverse the mining field, which are only slightly incised below prairie level, flow southward to the Neosho River. Elm Creek, on the western edge of the field, and Tar Creek are the principal streams in the main productive part of the field.

Topographic relief in the area is relatively small. The lowest point, south of Commerce, is about 780 feet National Geodetic Vertical Datum (NGVD). The average elevation is around 830 feet NGVD, and the highest point is about 900 feet NGVD.

Tar Creek is located within the Prairie Parkland Province (Bailey, 1980). Vegetation in this province is characterized by intermingled tallgrass prairie, with groves and strips of deciduous trees. This province covers an extensive area of about 218,200 square miles from Canada to Oklahoma, with alternating prairie and deciduous forests. Trees are commonly found near streams. Tallgrass prairie species are the dominant prairie vegetation. Most are moderately tall and usually grow in bunches. The dominant species include big bluestem, little bluestem, switchgrass, and Indian grass, along with many species of wildflowers and legumes. In many places where grazing and fire are controlled, deciduous forest is encroaching on the prairies. The upland forest in this area is dominated by oak and hickory. On floodplains and moist hillsides it includes eastern cottonwood, black willow, and American elm.

Prior to lead and zinc mining the project area was mainly upland timber and native grassland. Extensive ground coverage of chat left behind from mining operations resulted in the topsoil in the area being in very poor condition. The chat material is essentially devoid of organic content and will not support vegetation. As a result vegetation at the East Kenoyer Site is absent or of poor quality (Photo 4.4.1 and 4.4.2).

4.4.2 Soils

According to the US Department of Agriculture Soil Survey for Ottawa County, Oklahoma, both mine shafts are located in soils classified as Mine pits and dumps (Mp). This miscellaneous land type consists of piles of rock and chat from zinc and lead mines. The larger piles cover 40 acres or more, and some are over 200 feet tall and can be seen for miles.

In some areas there is only a thin covering of rock and chat. In many places drainage ways are blocked by rock and chat and nearby areas are ponded or made swampy. Seepage from these areas makes nearby soils, which are otherwise well drained, wet in many places. Most areas of this soil type are without vegetation. This miscellaneous land type has little value for agriculture. In some areas it has minor value for wildlife.

4.4.3 Prime Farmland

Soil that is prime or unique farmland as defined in the Farmland Protection Policy Act is classified as prime farmland. According to the U.S. Department of Agriculture, it is soil that is best suited for producing food, feed, forage, fiber, and oilseed crops. The Mine pits and dumps (Mp) classified soils are not classified as prime farmland.

4.4.4 Wild and Scenic Rivers

There are no streams within the project area that are classified as wild and scenic pursuant to the Federal Wild and Scenic Rivers Act, Public Law 90-542.

4.4.5 Fish and Wildlife

A small amount of fish habitat occurs in the vicinity of the East Kenoyer Site and this is primarily in mill ponds and local ponds with a limited amount of habitat in Tar Creek. Species that have been collected from streams, millponds, and local ponds in the area for contaminants analysis include carp, channel catfish, spotted bass, largemouth bass, bluegill sunfish, and smallmouth buffalo. Fish caught locally in these waters are a common part of the diet of persons in the area. The consumption of fish containing elevated levels of metals is a concern because chronic exposure to heavy metals can cause health problems. In comparison to fish collected in the National Contaminant Biomonitoring Program, the fish collected in this area had lead concentrations higher than normal. The elevated levels of lead in the fish were correlated positively to the concentration of lead in the sediments of the waters. The consumption of whole-eviscerated or whole-uneviscerated fish from these waters is discouraged. However, the consumption of fillets from fish in this area is safe at rates at least as high as six 8-ounce meals per month according to the Oklahoma Department of Environmental Quality (DEQ).



Photo 4.4.1 Typical ground cover at East Kenoyer Site; view east.



Photo 4.4.2 Ground cover at East Kenoyer Site; view north.

On July 17, 2003 the Oklahoma DEQ issued a News Release that concluded that skinless fish fillets from all species in the Tar Creek Superfund site are safe to eat. However, DEQ's data indicate that lead and cadmium are present and above safe levels for consumption in bottom feeding species like carp, buffalo, and catfish when fish flesh and bones are combined.

Several species of amphibians, reptiles, and birds occur in the vicinity of the project. However, wildlife diversity and numbers are very limited because of the extremely poor or non-existent habitat.

Mammals most likely to occur in the area include species such as fox squirrel (*Sciurus niger*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), opossum (*Didelphis marsupialis*), striped skunk (*Mephitis mephitis*), and cottontail rabbit (*Sylvilagus floridanus*).

4.5 Wetlands

Although the East Kenoyer Site is adjacent to a small wetland area the project should not negatively impact the wetland (Photo 4.5.1). Also, U.S. Army Corps of Engineers policy in accordance with Regulatory Guidance Letter 85-07 for Superfund Projects is that environmental response actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) do not require authorization under Section 404 of the Clean Water Act (Appendix C). The East Kenoyer reclamation project qualifies as a CERCLA response action under this policy. Therefore, the project is not subject to regulation pursuant to Section 404 of the Clean Water Act, and a Department of the Army permit is not required.

4.6 Threatened and Endangered Species

Federally listed species that could occur in Ottawa County include the endangered gray bat (*Myotis grisescens*), endangered Ozark big-eared bat (*Corynorhinus townsendii*), endangered American burying beetle (*Nicrophorus americanus*), endangered winged mapleleaf mussel (*Quadrula fragosa*), the threatened bald eagle (*Haliaeetus leucocephalus*), threatened Neosho madtom (*Noturus placidus*), threatened Ozark cavefish (*Amblyopsis spelaea*), and threatened piping plover (*Charadrius melodus*).

The gray bat was listed in 1976. It is a medium sized bat with a wingspan of 10 to 11 inches and a total length of 4 to 5 inches. It has grayish brown fur and is the only bat within its range with unicolored dorsal hair. The bat roosts almost exclusively in caves year-round and has very specific requirements. They are generally limited to limestone caves, and have specific temperature requirements.

The Ozark big-eared bat was listed 1973. It is a medium sized bat with large ears. Its snout has prominent lumps and its fur ranges from light to dark brown. It is found in caves, cliffs, and rock ledges associated with oak-hickory forests of the Ozarks. They forage along the edges of upland forests for insects.

The American burying beetle was listed in 1989. It is the largest of the burying beetle species reaching a length of 1 to 1 ½ inches. It is a relatively robust beetle having shiny black elytra with four orange-red spots. It also has a large orange-red spot on the pronotum which is indicative of the species. The habitat requirement for the American burying beetle is not fully understood and it is considered a habitat generalist.

The winged mapleleaf mussel was listed in 1991. Originally it existed in 13 states in river and stream tributaries to the Mississippi River. Today it is found in one river, the St. Croix River, in Minnesota and Wisconsin. It is found in riffles with clean gravel, sand, or rubble bottoms and in clear, high quality water.

The Neosho madtom was listed in 1991. It has features characteristic of all North American catfish, including scaleless skin and a relatively large head with sensory barbels. Adult Neosho madtoms average less than three inches in length. They have a brownish midline stripe and an overall mottled appearance. The preferred habitat of adult Neosho madtoms is shallow riffles with loose, incompact gravel bottoms. They are occasionally found in areas with sandy bottoms covered with leaf litter.

The Ozark cavefish was listed in 1984. It is a small, (2 to 2 ¼ inches), blind, pinkish-white fish that lives in cave streams and springs within the Springfield Plateau in Arkansas, Missouri, and Oklahoma.



Photo 4.5.1 Wetland along Tar Creek adjacent to East Kenoyer Site; view northwest upstream.

The bald eagle was listed in 1967. Bald eagles prefer large trees or high cliffs along large waterways for perching, foraging, and nesting purposes. It forages for fish, waterfowl, and carrion along lakes and waterways.

The piping plover was listed in 1985. It is a small shorebird about seven inches long with a wingspan of 15 inches. Adults have sand-colored upper parts with white undersides and are easily distinguished by their bright orange legs. This species migrates across the eastern $\frac{3}{4}$ of Oklahoma during the spring and fall utilizing sandy shorelines on lakes and sandbars along the major river systems for forage and resting areas.

4.7 Cultural Resources

In accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, consultation was initiated in 2004 with the Oklahoma State Historic Preservation Office (SHPO). The Picher-Cardin mining area is potentially a historic district eligible for listing on the National Register of Historic Places. Numerous historic structures related to the historic mining activities in the area are present within the Picher Field project area. These structures may include, but are not limited to, processing towers, mine shafts, foundations, structure footings, and chat waste piles. Many or all of these historic features or structures may be contributing elements to a potential National Register historic district. Consultation for the general Tar Creek area, specifically relating to the Picher Field, was also initiated with appropriate Native American tribes. These tribes included the Caddo Tribe of Oklahoma, Cherokee Nation of Oklahoma, Delaware Tribe of Indians of Oklahoma, Eastern Shawnee Tribe of Oklahoma, Miami Tribe of Oklahoma, Modoc Tribe of Oklahoma, Osage Nation of Oklahoma, Ottawa Tribe of Oklahoma, Peoria Tribe of Indians of Oklahoma, Quapaw Tribe of Oklahoma, Seneca-Cayuga Tribe of Oklahoma, Wichita and Affiliated Tribes of Oklahoma, and Wyandotte Tribe of Oklahoma.

4.8 Water Quality

Mining began in Ottawa County in the early 1900's and continued until the 1970's. The Boone Formation is the geological formation that was the source of the metal ore. The Boone Formation is also an aquifer. Due to the presence of the aquifer in the ore-producing Boone Formation, the mining companies were forced to pump large volumes of water from the extensive underground mine workings. Pumping continued until the mining ceased, at which time the aquifer and the mines began refilling. As water filled the mines, sulfide minerals within the mines, which had been oxidized by exposure to air, dissolved, creating acid mine water. By 1979, water levels had increased to the point that the acid mine water began discharging at the surface from numerous locations, severely impacting Tar Creek.

In addition, millions of tons of mine tailings and other waste material left over from the mining operations are present in the Picher area. Runoff from these materials is characterized by elevated concentrations of metals; especially iron, zinc, lead, and cadmium; and mineral acidity and sulfate. Thus these mine tailings, ponds, and wetlands along the west side of the site contain many toxicants including lead and other heavy metals (Photo 4.8.1).

4.9 Air Quality

The U.S. Environmental Protection Agency (EPA) published a Conformity Rule on November 30, 1993, requiring all Federal actions to conform to appropriate State Implementation Plans (SIP's) that were established to improve ambient air quality. At this time, the Conformity Rule only applies to Federal actions in non-attainment areas. A non-attainment area is an area that does not meet one or more of the National Ambient Air Quality Standards for the criteria pollutants designated in the Clean Air Act (CAA).

A conformity determination based on air emission analysis is required for each proposed Federal action within a non-attainment area. Since this geographical region is in attainment and meets the National Air Quality Standards for the criteria pollutants designated in the CAA, a conformity determination is not required.

4.10 Hazardous, Toxic, and Radiological Waste

The Tar Creek Superfund site was added to the National Priorities List in 1983 because of the presence of hazardous and toxic waste material. Extensive lead and zinc mining in the tri-state area resulted in the formation of acid mine water which has affected the groundwater, sediments, and surface water at this site with heavy metals, including arsenic, cadmium, iron, manganese, nickel, lead, and zinc. The hazardous waste on the site is a primary focus of the proposed actions described in this EA.

Ground water is the principal source of water for domestic and industrial users adjacent to and within the Picher Geologic Field. The Roubidoux and Boone Formations are the principal ground water aquifers in this region. All public water supplies and most industrial water supplies in Ottawa County come from wells drilled into the Roubidoux Formation. This aquifer is generally 900-1,000 feet deep in the mining area. ODEQ evaluated public water supply sampling results and determined the quality of water produced from the Roubidoux aquifer met primary drinking water standards. The Boone Formation is the second most important source of ground water in Ottawa County. However, the Boone Formation is closer to the surface than the Roubidoux Formation and is subject to contamination from surface water through fractures, sink holes, drill holes, and mine shafts. Most of the lead and zinc mining was done in the Boone Formation, which is 350-400 feet thick in the Picher Field. A large network of interconnected underground mines and tunnels was created in the Boone Formation during mining operations. Surface water infiltration is a serious drawback to the utilization of Boone ground water as a reliable public water source.

Presently, the major health threat is the lead and cadmium in off-site contaminated chat that was distributed as sand and gravel fill to playgrounds, schoolyards, ball fields, homeowners for yards and driveways, and on roadways. In addition numerous chat piles are scattered throughout the area. Inhalation and ingestion of lead contaminated dust from the chat appears to be the source of a significant number of elevated blood lead levels in children living and playing in the areas near chat.



Photo 4.8.1 Runoff from mine tailings introduce toxicants and other heavy metals; view south downstream.

SECTION 5.0 ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

A summary of environmental impacts is presented in Table 5.0, Impact Assessment Matrix.

5.1 Social and Economic Impacts

5.1.1 Future Without-Project Conditions

Under the without-project conditions, social and economic conditions would follow the current trends. Population growth, racial and ethnic composition, job opportunities, employment, income, and population density would continue the status quo under without-project conditions.

The most significant aspect of the without-project alternative is that environmental, health, and safety hazards would continue to exist at the site and contaminated runoff would continue to enter the wetlands to the west.

5.1.2 Future With-Project Conditions

Under the with-project conditions, social and economic conditions would follow or slightly improve over the current trends. Population growth, racial and ethnic composition, and population density would continue the status quo under with-project conditions. Job opportunities, employment, and income would temporarily rise as a

Table 5.0
Impact Assessment Matrix

Name of Parameter	Relative Magnitude of Probable Impact						
	Increasing Beneficial Impact			No Appreciable Effect	Increasing Adverse Impact		
	Significant	Substantial	Minor		Minor	Substantial	Significant
A. Social Effects							
1. Noise Levels				X			
2. Aesthetic Values		X					
3. Recreational Opportunities		X					
4. Transportation				X			
5. Public Health and Safety	X						
6. Community Cohesion (Sense of Unity)		X					
7. Community Growth and Development			X				
8. Business and Home Relocations			X				
9. Existing/Potential Land Use			X				
10. Controversy	X						
B. Economic Effects							
1. Property Values			X				
2. Tax Revenues			X				
3. Public Facilities and Services		X					
4. Regional Growth			X				
5. Employment			X				
6. Business Activity		X					
7. Farmland/Food Supply		X					
8. Flooding Effects				X			
C. Natural Resource Effects							
1. Air Quality				X			
2. Terrestrial Habitat		X					
3. Wetlands		X					
4. Aquatic Habitat				X			
5. Habitat Diversity and Interspersion			X				
6. Biological Productivity		X					
7. Surface Water Quality		X					
8. Water Supply			X				
9. Groundwater			X				
10. Soils			X				
11. Threatened and Endangered Species				X			
D. Cultural Resources Effects							
1. Historic Architectural Values				X			
2. Pre-Historic & Historic Archeological Values					X		

result of construction activities. Construction would generate additional jobs and local businesses would realize additional income through providing goods and services to construction personnel.

The East Kenoyer Site is within the boundary of the Tar Creek Superfund Site. In an effort to assume a more vital leadership role in attacking the myriad environmental, health, and safety problems associated with the nation's highest-ranking Superfund site, Oklahoma Governor Frank Keating formed the Tar Creek Superfund Task Force in 2000. The Task Force was charged with developing a comprehensive remediation plan for the area.

This demonstration project qualifies as a CERCLA response action and was designed following the objectives of the Land Remediation and Restoration section of the Oklahoma Plan for Tar Creek developed by the Task Force. It is designed to reduce sedimentation into Tar Creek from the adjacent chat piles, reduce the direct exposure of humans and wildlife to mine waste, improve water quality standards, increase the aesthetic value, and increase the post-mining usefulness of the reclaimed area. The negative health and environmental effects of abandoned mine workings would be removed at this site including residual fine and coarse mine waste, large and small chat piles, waste rock piles, extensive chat bases, and mill ponds. Reclamation would reduce hazardous health and safety conditions including the exposure of lead dust.

5.2 Executive Order 12898

Reclamation of the East Kenoyer Site would have a positive economic and health effect on minorities and low-income populations.

5.3 Executive Order 13045

Reclamation of the East Kenoyer Site would have a positive effect on children's health and safety.

5.4 Natural Resource Impacts

5.4.1 Terrestrial

Prior to lead and zinc mining the Picher area was mainly upland timber and native grassland. Extensive ground coverage of chat left behind from mining operations resulted in the topsoil in the area being in very poor condition. The chat material is essentially devoid of organic content and will not support vegetation. As a result vegetation at the East Kenoyer Site is absent or of poor quality.

Reclamation of the site would not result in the loss of any significant habitat or cause any significant adverse effects on the natural environment. The intent of the project is to improve the site and return the habitat to as near as practical to the condition it exhibited prior to the onset of mining activities. However, the return of the habitat to its historic condition is unrealistic and would likely be impossible to achieve. Restoration will return the area to better than existing habitat as discussed in Section 6.0.

5.4.2 Prime Farmland

There would be no impact on prime farmland since soils classified as prime farmland soils do not occur in the project area.

5.4.3 Aquatic and Wetlands

Tar Creek and its associated wetlands run along the west boundary of the East Kenoyer Site, but this project does not include remediation of Tar Creek. Future projects are being discussed that would address the reclamation of Tar Creek from the Kansas state line to its confluence with the Neosho River. This project should produce a net positive benefit for aquatic habitat and wetlands because of the reduction of exposed mine spoils which have proven to be responsible for contaminants in runoff.

5.4.4 Wildlife

Disturbance from noise caused by construction activities would create a minor, short-term impact on wildlife in the immediate construction vicinity. This disturbance would be temporary and would disappear when construction activities cease. The completed project would provide a net positive benefit for wildlife.

5.5 Wetlands and Water Quality Permits

U.S. Army Corps of Engineers policy in accordance with Regulatory Guidance Letter 85-07 for Superfund Projects is that environmental response actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) do not require authorization under Section 404 of the Clean Water Act. This demonstration project qualifies as a CERCLA response action under this policy. Therefore, the project is not subject to regulation pursuant to Section 404 of the Clean Water Act, and a Department of the Army permit is not required.

5.6 Threatened and Endangered Species

Reclamation of the East Kenoyer Site would have no impact on threatened and endangered species.

5.7 Cultural Resources

In 2004 Tulsa District executed a Memorandum of Agreement (MOA) with the Oklahoma State Historic Preservation Office (SHPO) and Bureau of Indian Affairs, Eastern Oklahoma Region (BIA) for a series of five small pilot projects in the Tar Creek area in order to achieve compliance under Section 106. In February 2005, Tulsa District executed a Programmatic Agreement (PA) with the Advisory Council on Historic Preservation (ACHP), SHPO, Oklahoma Archeological Survey (OAS), Quapaw Tribe of Oklahoma, and a number of other federal agencies, resulting in Section 106 compliance under a set of stipulations. Most significantly, the PA requires the full development of a Heritage Study for the Tar Creek area which addresses the history and importance of lead and zinc mining and the association of identifiable groups such as the Quapaw Tribe.

As outlined in section 3.6, Section 106 coordination with the Advisory Council on Historic Preservation has resulted in a Programmatic Agreement (PA). The PA specifically exempts all environmental remediation activities within a particular “core area” as outlined in the PA. Outside of the “core area”, but still within the area of potential effect as identified in the PA, certain activities, including the filling and capping of mine shaft entrances, are categorically excluded from further Section 106 review. Activities not specifically excluded, however, may be required to undergo Section 106 review. Execution of the PA is evidence that Tulsa District has complied with the requirements of Section 106 of the National Historic Preservation Act of 1966 (as amended) (Appendix B).

5.8 Water Quality

The project is designed to remove the material from the abandoned mine workings including residual fine and coarse mine waste, large and small chat piles, waste rock piles, extensive chat bases, and mill ponds from the surface and replace it with topsoil capable of supporting vegetation. Any impact on water quality derived from this project would be positive since runoff from the existing material is characterized by elevated concentrations of metals; especially iron, zinc, lead, and cadmium; and mineral acidity and sulfate. This project would provide a positive effect on surface water quality, which is one of the major objectives of the Oklahoma Plan for Tar Creek.

5.9 Air Quality

Construction activity would have a minor temporary impact on air quality caused by heavy equipment operation and from fugitive dust (particulate) emissions in and around the project site. Construction contractors will comply with all appropriate Federal air quality regulations to limit the dispersal of particulate matter. A temporary increase in exhaust emissions would be expected during construction.

5.10 Hazardous, Toxic, and Radiological Waste

Reclamation of the East Kenoyer Site would have a positive impact on HTRW. The Tar Creek Superfund site was added to the National Priorities List in 1983 because of the presence of hazardous and toxic waste material. Extensive lead and zinc mining in the tri-state area resulted in the deposition of millions of tons of surface spoils containing heavy metals including arsenic, cadmium, iron, manganese, nickel, lead, and zinc which has affected the surface water at this site. The hazardous waste on the site is a primary focus of the proposed actions described in this EA.

The Boone Formation, where most lead and zinc ore was extracted, is the second most important aquifer for groundwater in the area and is subject to contamination from surface water through fractures, sink holes, drill holes, and open mine shafts. A large network of interconnected underground mines and tunnels was created in the Boone Formation during mining operations. Surface water infiltration is a serious drawback to the utilization of Boone ground water as a reliable public water source.

5.11 Noise

There would be an increase in noise from heavy equipment during construction, but this would be temporary and last only during the construction period.

5.12 Cumulative Impacts

This demonstration project is only one of many in the Superfund site planned to help clean up the environmental problems associated with early lead and zinc mining. This project was designed following the objectives of the Land Remediation and Restoration section of the Oklahoma Plan for Tar Creek. Cumulative positive impacts would occur as a result of the proposed project. Positive impacts would occur to the health and safety of local citizens, particularly children. Cumulative positive impacts would occur by reduction of about 29 acres in the number of surface acres of mine spoils containing heavy metals and by removing another potential source of groundwater contamination.

SECTION 6.0 RESTORATION PLAN

Congress has given authority and provided appropriations to the Corps of Engineers to implement demonstration projects determined by the Secretary of the Army to address lead exposure and other environmental problems related to historical mining activities at the Tar Creek Superfund Site. Reclamation projects recommended in the Oklahoma Plan for Tar Creek are the main focus of this appropriated money. The East Kenoyer Site was chosen as a potential demonstration site through meetings with the State of Oklahoma, City of Picher, land owners, and the Corps of Engineers. It was coordinated with and concurred by the State Oklahoma through these meetings.

The purpose of this project is to meet the goal of Mitigation of Hazards through Land Remediation and Restoration of the Oklahoma Plan. Currently the area is mostly devoid of vegetation and covered with chat and fine grained waste material. Remediation of the site will be accomplished through implementation of a series of seven performance objectives. These seven objectives are listed below.

Objective 1. Elimination of direct human and surface water exposure to mine waste and dust emissions from the mine waste at the surface. Mine waste includes chat bases, chat, chat piles and millpond material throughout the entire project area.

Remediation shall permanently control and reduce fugitive dusts derived from chat bases, chat, chat piles, the millpond, and other mine wastes present at the site. Remediation measures shall also permanently control and eliminate mining related wastes from entering Tar Creek. Fugitive dusts contributed from the site during construction activities and after construction is complete shall not exceed the EPA national primary and secondary ambient air quality standards for PM 10 and particulate matter (Sections 50.6 and 50.7) and lead (Section 50.12). Contractor must have and follow a fugitive dust control plan and provide for self monitoring of fugitive dusts during the construction phase of the project.

Objective 2. Successful re-vegetation will be accomplished over the entire property including areas over chat bases, chat, chat piles, and millpond wastes.

The entire property will have live vegetation consisting of native or introduced grasses and the same number or a greater number of trees that are currently present at the site distributed over the entire property not covered with foundations or established surface water features (ponds, creeks), for the minimum establishment period. The establishment period will follow the completion of all planting, and shall extend through the growing season or until September 1, 2005 whichever comes first. At the end of the establishment period, a minimum of 95% of the established vegetation shall be living and thriving.

Objective 3. There will be no impact to the 100-year flood plain.

The reclamation activities that take place at the East Kenoyer Site will not change the existing 100-year flood plain.

Objective 4. The borrow material used will be free from contamination.

The borrow material (topsoil, fill, etc.) applied to the site will not have metals or organic contaminants at concentrations above the latest EPA Region 6 Medium Specific Screening Levels (MSSL's) for residential areas as determined through analytical testing.

Objective 5. The post-reclamation property must have adequate drainage.

The post-reclamation property must have established grading and drainage that must be able to convey water on to and off of the site during a 25-year 24-hour storm event without development of areas of water ponding.

Objective 6. Monitoring of groundwater during chat injection activities.

Any chat that is injected back into the mine workings shall not adversely impact the water quality that is in currently in the mine workings.

Objective 7. Elimination of mine wastes at surface to maximum extent possible.

The area impacted shall be reduced in size. To the maximum extent possible while still achieving Objective 1. Non-impacted land is defined as the native soil beneath the mine waste having a lead concentration that is less than 1200 ppm (EPA TSCA Section 4) based on analytical testing.

SECTION 7.0 FEDERAL, STATE, AND LOCAL AGENCY COORDINATION

A notice of availability of the Finding of No Significant Impact (FONSI) was provided to the following tribes, agencies, and organizations having responsibilities or interests in the Tar Creek Superfund Site.

Senator Jim Inhofe
Senator Tom Coburn
Representative Dan Boren
State Representative Larry Roberts
State Senator Rick Littlefield
U.S. Environmental Protection Agency
Oklahoma Department of Environmental Quality
Advisory Council on Historic Preservation
Oklahoma State Historic Preservation Office
Oklahoma Archeological Survey
Quapaw Tribe of Oklahoma
Eastern Shawnee Tribe of Oklahoma
Wyandotte Tribe of Oklahoma

Wichita and Affiliated Tribes of Oklahoma
Seneca-Cayuga Tribe of Oklahoma
Peoria Tribe of Indians of Oklahoma
Ottawa Tribe of Oklahoma
Osage Nation of Oklahoma
Modoc Tribe of Oklahoma
Miami Tribe of Oklahoma
Delaware Tribe of Indians of Oklahoma
Caddo Indian Tribe of Oklahoma
Cherokee Nation of Oklahoma
Bureau of Indian Affairs, U.S. Department of the Interior
Oklahoma Geological Survey
Office of Surface Mining, U.S. Department of the Interior
Oklahoma Conservation Commission
USDA Natural Resources Conservation Service
U.S. Fish and Wildlife Service
Oklahoma Department of Wildlife Conservation
Ottawa Reclamation Authority
City of Picher
Ottawa County Commissioner, District #1

SECTION 8.0 REFERENCES

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SECTION 9.0 APPLICABLE ENVIRONMENTAL LAWS AND REGULATIONS

Table 9.0

Relationship of Plans to Environmental Protection Statutes and Other Environmental Requirements

Policies	Compliance of Alternatives
<u>Federal</u>	
Archeological and Historic Preservation Act, 1974, as amended, 16 U.S.C. 469, <u>et seq.</u>	All plans in full compliance
Clean Air Act, as amended, 42 U.S.C. 7609, <u>et seq.</u>	All plans in full compliance
Clean Water Act, 1977, as amended (Federal Water Pollution Control Act, 33 U.S.C. 1251, <u>et seq.</u>	All plans in full compliance
Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. 103, <u>et seq.</u>	All plans in full compliance
Endangered Species Act, 1973, as amended, 16 U.S.C. 1531, <u>et seq.</u>	All plans in full compliance
Federal Water Project Recreation Act, as amended, 16 U.S.C. 460-1-12, <u>et seq.</u>	N/A
Fish and Wildlife Coordination Act, as amended, 16 U.S.C. 661, <u>et seq.</u>	All plans in full compliance
Land and Water Conservation Fund Act, 1965, as amended, 16 U.S.C. 4601, <u>et seq.</u>	N/A
National Historic Preservation Act, 1966, as amended, 16 U.S.C. 470a, <u>et seq.</u>	All plans in full compliance
National Environmental Policy Act, as amended, 42 U.S.C. 4321, <u>et seq.</u>	All plans in full compliance
Native American Graves Protection and Repatriation Act, 1990, 25 U.S.C. 3001-13, <u>et seq.</u>	All plans in full compliance
Rivers and Harbors Act, 33 U.S.C. 401, <u>et seq.</u>	N/A
Watershed Protection and Flood Prevention Act, 16 U.S.C. 1001, <u>et seq.</u>	N/A
Wild and Scenic Rivers Act, as amended, 16 U.S.C. 1271, <u>et seq.</u>	N/A
Water Resources Planning Act, 1965	N/A
Floodplain Management (E.O. 11988)	All plans in full compliance
Protection of Wetlands (E.O. 11990)	All plans in full compliance
Environmental Justice (E.O. 12898)	All plans in full compliance
Farmland Protection Policy Act, 7 U.S.C. 4201, <u>et seq.</u>	All plans in full compliance
Protection of Children From Environmental Health Risks and Safety Risks (E.O. 13045)	All plans in full compliance

Note: Full compliance - Having met all requirements of the statutes, Executive Orders, or other environmental requirements for the current stage of planning.

SECTION 10.0 LIST OF PREPARERS

This EA has been prepared to assess the impacts of a demonstration project for reclamation of the East Kenoyer Site near Picher, Ottawa County, Oklahoma, in the Tar Creek Superfund site. The following personnel contributed to the preparation of this document.

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APPENDIX A

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Mr. Benny Miller
Executive Director
Ottawa Reclamation Authority
207 East 10th
Picher, OK 74360

Mr. Sam Freeman
Mayor
City of Picher
213 East 3rd
Picher, OK 74360

Mr. Joe Crawford
Ottawa County Commissioner, District 1
103 East 1st
Quapaw, OK 74363

APPENDIX B

CULTURAL RESOURCES COORDINATION



DEPARTMENT OF ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 2, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. Leaford Bearskin, Chief
Wyandotte Tribe of Oklahoma
P.O. Box 250
Wyandotte, OK 74370

Dear Chief Bearskin:

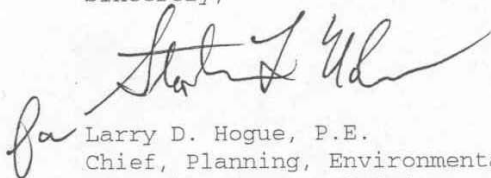
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Any information or comments you may be able to provide will be appreciated. If you have any questions, please contact Ken Shingleton at 918-669-7661.

Sincerely,


Larry D. Hogue, P.E.
Chief, Planning, Environmental
and Regulatory Division



DEPARTMENT OF ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 2, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. Gary McAdams, President
Wichita and Affiliated Tribes of Oklahoma
P.O. Box 729
Anadarko, OK 73005

Dear President McAdams:

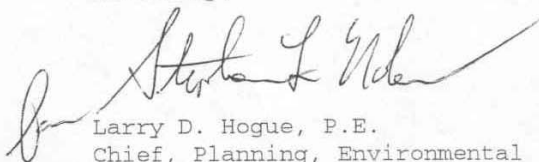
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Chief, Planning, Environmental
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CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 2, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. Leroy Howard, Chief
Seneca-Cayuga Tribe of Oklahoma
P.O. Box 1283
Miami, OK 74355

Dear Chief Howard:

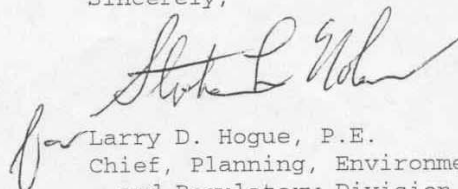
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for Larry D. Hogue, P.E.
Chief, Planning, Environmental
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DEPARTMENT OF ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 2, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. John Berrey, Chairman
Quapaw Tribe of Oklahoma
P.O. Box 765
Quapaw, OK 74363

Dear Chairman Berrey:

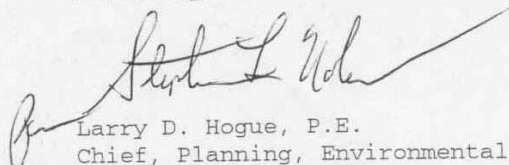
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Chief, Planning, Environmental
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CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 2, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. John Froman, Chief
Peoria Tribe of Indians of Oklahoma
P.O. Box 1527
Miami, OK 74355

Dear Chief Froman:

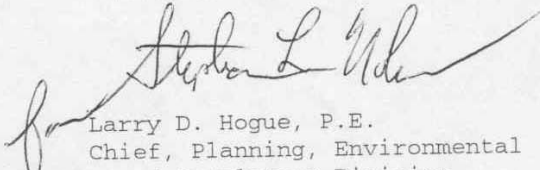
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CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 2, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. Todd Charles, Chief
Ottawa Tribe of Oklahoma
P.O. Box 110
Miami, OK 74355

Dear Chief Charles:

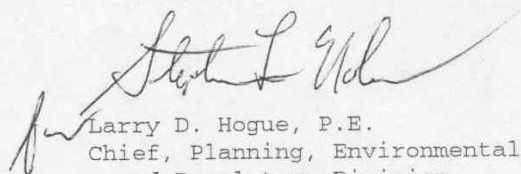
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CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 2, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. Jim Gray, Principal Chief
Osage Nation of Oklahoma
P.O. Box 779
Pawhuska, OK 74056

Dear Chief Gray:

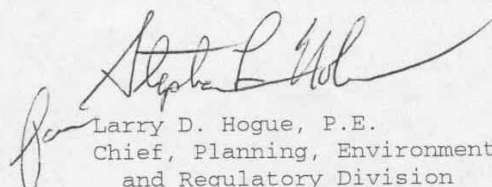
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Chief, Planning, Environmental
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DEPARTMENT OF ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 2, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. Bill G. Follis, Chief
Modoc Tribe of Oklahoma
515 G SE Street
Miami, OK 74354

Dear Chief Follis:

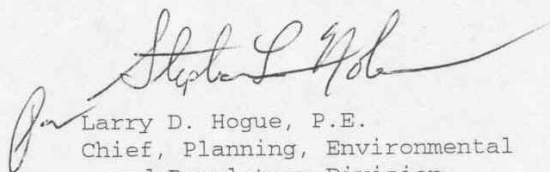
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Chief, Planning, Environmental
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DEPARTMENT OF ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 2, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. Floyd Leonard, Chief
Miami Tribe of Oklahoma
P.O. Box 1326,
202 S. Eight Tribes Trail
Miami, OK 74355

Dear Chief Leonard:

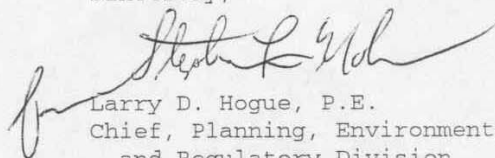
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DEPARTMENT OF ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 2, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. Charles Enyart, Chief
Eastern Shawnee Tribe of Oklahoma
P.O. Box 350
Seneca, MO 64865

Dear Chief Enyart:

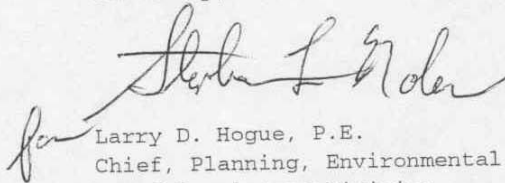
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for Larry D. Hogue, P.E.
Chief, Planning, Environmental
and Regulatory Division



DEPARTMENT OF ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 2, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. Larry Joe Brooks, Chief
Delaware Tribe of Indians of Oklahoma
220 NW Virginia Ave.
Bartlesville, OK 74003

Dear Chief Brooks:

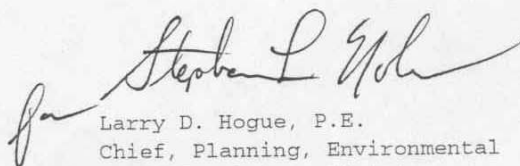
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CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 2, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. Chad Smith, Principal Chief
Cherokee Nation of Oklahoma
P.O. Box 948
Tahlequah, OK 74465

Dear Chief Smith:

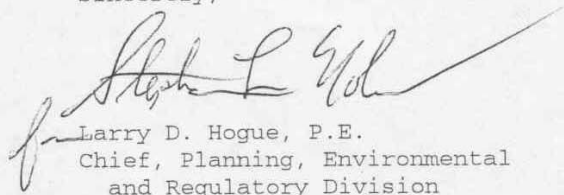
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Chief, Planning, Environmental
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DEPARTMENT OF ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 2, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Ms. LaRue Parker, Chairwoman
Caddo Indian Tribe of Oklahoma
P.O. Box 487
Binger, OK 73009

Dear Chairwoman Parker:

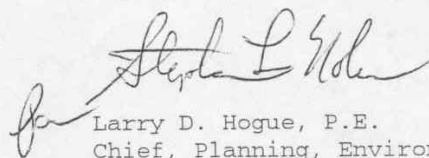
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Tulsa District will be conducting cultural resources investigations of these project areas to comply with the requirements of Section 106 of the National Historic Preservation Act of 1966 (as amended). Please review these areas for information that you may be willing to share with us on archaeological or historic sites, sacred sites, or traditional cultural properties that may be significant to you. Information you may be able to provide will assist us in assessing the effects of the proposed project on cultural resources.

Any information or comments you may be able to provide will be appreciated. If you have any questions, please contact Ken Shingleton at 918-669-7661.

Sincerely,


Larry D. Hogue, P.E.
Chief, Planning, Environmental
and Regulatory Division



EASTERN SHAWNEE TRIBE OF OKLAHOMA

P.O. Box 350 · Seneca, MO 64865 · (918) 666-2435 · FAX (918) 666-2186

June 9, 2004

Department of Army
Corps of Engineers, Tulsa District
1645 South 101st East Avenue
Tulsa, Oklahoma 71428-4609

Re: PL 108-137

To Whom It May Concern:

Thank you for notice of the referenced project(s). The Eastern Shawnee Tribe of Oklahoma is currently unaware of any documentation directly linking Indian Religious Sites to the proposed construction. In the event any items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered during construction, the Eastern Shawnee Tribe request notification and further consultation.

The Eastern Shawnee Tribe has no objection to the proposed construction. However, if any human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction, the construction should stop immediately, and the appropriate persons, including state and tribal NAGPRA representatives contacted.

Sincerely,

Charles Enyart, Chief
Eastern Shawnee Tribe of Oklahoma

Kathleen A. Welch
Environmental Assistant



PEORIA TRIBE OF INDIANS OF OKLAHOMA

118 S. Eight Tribes Trail (918) 540-2535 FAX (918) 540-2538
P.O. Box 1527
MIAMI, OKLAHOMA 74355

CHIEF
John P. Froman

SECOND CHIEF
Joe Goforth

November 18, 2004

Department of Army
Corps of Engineers, Tulsa District
1645 South 101st East Avenue
Tulsa, OK 74128-4609

RE: U.S. Army Corps of Engineers, Tulsa Creek Superfund Site, which is located in the vicinity of the towns of Picher and Cardin, northeast Oklahoma. The proposed emergency undertaking consist of plugging and capping eleven mineshaft openings which represent an immediate hazard to human life because of proximity to characteristics of the shafts themselves.

Thank you for notice of the referenced projects. The Peoria Tribe of Indians of Oklahoma is currently unaware of any documentation directly linking Indian Religious Sites to the proposed construction. In the event any items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered during construction, the Peoria Tribe request notification and further consultation.

The Peoria Tribe has no objection to the proposed construction. However, if any human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction, the construction should stop immediately, and the appropriate persons, including state and tribal NAGPRA representatives contacted.

John P. Froman
Chief

xc: Bud Ellis, Repatriation/NAGPRA Committee Chairman

TREASURER
John Sharp

SECRETARY
Hank Downum

FIRST COUNCILMAN
Claude Landers

SECOND COUNCILMAN
Jenny Rampey

THIRD COUNCILMAN
Jason Dollarhide



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 25, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Dr. Robert Brooks
State Archaeologist
Oklahoma Archeological Survey
111 E. Chesapeake
Norman, OK 73019

Dear Dr. Brooks:

This letter is to initiate consultation as required under Section 106 of the National Historic Preservation Act of 1966 (as amended) for a series of five proposed pilot environmental remediation projects located in the Pitcher-Cardin lead and zinc mining area of northeast Oklahoma. These activities have been authorized in Section 111 of the Energy and Water Development Appropriation Act of 2004 (PL 108-137). The purpose of these small scale projects is to evaluate a variety of remediation technologies for potential future implementation. The project areas (see enclosed maps) are located in Sections 20, 28, and 29, Township 29 North, Range 23 East; Section 36, Township 29 North, Range 22 East; and Section 7, Township 28 North, Range 22 East, in Ottawa County, Oklahoma.

The proposed pilot remediation project includes the following: (1) construct a diversion channel for passive treatment of stormwater drainage; (2) plug/secure two mine shafts; (3) mitigate unvegetated mining spoils between Boys and Girls Club and Picher-Cardin schools; (4) mitigate unvegetated mining spoils by using them to fill a subsidence pond; and (5) mitigate unvegetated mining spoils between residences and the Kenoyer chat pile by creating a "green buffer zone".

In accordance with Section 106, Tulsa District initiated fieldwork to identify historic properties. An initial surface reconnaissance of all five areas was conducted by a Corps of Engineers archaeologist on May 19, 2004. Subsequently, Tulsa District contracted to Lopez Garcia Group (LGG) to perform the majority of the fieldwork and associated historical and archival research. This work was conducted in June 2004, and a draft report of investigations is enclosed for your review. Unfortunately, Study Area 1, as it is identified in the report, remains

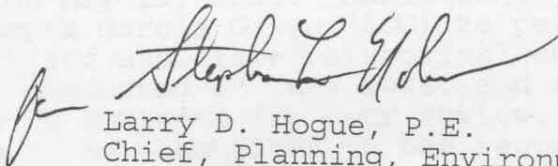
uninvestigated because real estate access could not be granted quickly. This area will be investigated at a later date and included in the final version of the LGG report. Subsequently, it will be properly coordinated with your office at that time.

We have reviewed the draft report produced by Lopez Garcia Group and we agree with the firm's recommendations that none of the recorded archaeological sites (34OT103-107) and all but one of the recorded standing structures (Structures 1, 2, and 4-15) are not individually eligible for listing on the National Register (NRHP). However, we also agree with Lopez Garcia Group that nearly all of these sites and structures (minus Structures 5, 6, 10, and 15) may be contributing elements to a potential National Register historic district, based on their association with the historic Tri-State mining district. In fact, there may be numerous contributing elements to such a district - perhaps eligible on a thematic basis - but this is unconfirmed because there is no complete inventory of historic properties in the area. In addition to a potential NRHP-eligible historic district, we concur with LGG that one standing structure, Structure 3, is individually eligible for listing on the NRHP under Criterion C.

Based on these investigations, we believe there will be "no adverse effect" for historic properties within these project areas in the vicinity of the Picher-Cardin area. To support this position, Tulsa District has ensured that all engineering plans and specifications call for all historic standing structures and historic structural features to be left unmodified and in place. Exceptions to this include mine shaft openings and chat piles, which are central to project remediation goals and represent health hazards.

We greatly appreciate your willingness to expedite these pilot projects and understand that a full cultural resources study of the Picher-Cardin area will be necessary and essential for the progression of the Corps of Engineers' environmental remediation program. We request your review of the enclosed report and your comment on our finding of "no adverse effect." If you have any questions, please contact Mr. Ken Shingleton at 918-669-7661.

Sincerely,



Larry D. Hogue, P.E.
Chief, Planning, Environmental
and Regulatory Division

Enclosures



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 25, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Dr. Bob Blackburn
State Historic Preservation Officer
Oklahoma Historical Society
2704 Villa Prom, Shepherd Mall
Oklahoma City, OK 73107

Dear Dr. Blackburn:

This letter is to initiate consultation as required under Section 106 of the National Historic Preservation Act of 1966 (as amended) for a series of five proposed pilot environmental remediation projects located in the Pitcher-Cardin lead and zinc mining area of northeast Oklahoma. These activities have been authorized in Section 111 of the Energy and Water Development Appropriation Act of 2004 (PL 108-137). The purpose of these small scale projects is to evaluate a variety of remediation technologies for potential future implementation. The project areas (see enclosed maps) are located in Sections 20, 28, and 29, Township 29 North, Range 23 East; Section 36, Township 29 North, Range 22 East; and Section 7, Township 28 North, Range 22 East, in Ottawa County, Oklahoma.

The proposed pilot remediation project includes the following: (1) construct a diversion channel for passive treatment of stormwater drainage; (2) plug/secure two mine shafts; (3) mitigate unvegetated mining spoils between Boys and Girls Club and Picher-Cardin schools; (4) mitigate unvegetated mining spoils by using them to fill a subsidence pond; and (5) mitigate unvegetated mining spoils between residences and the Kenoyer chat pile by creating a "green buffer zone".

In accordance with Section 106, Tulsa District initiated fieldwork to identify historic properties. An initial surface reconnaissance of all five areas was conducted by a Corps of Engineers archaeologist on May 19, 2004. Subsequently, Tulsa District contracted to Lopez Garcia Group (LGG) to perform the majority of the fieldwork and associated historical and archival research. This work was conducted in June 2004, and a draft report of investigations is enclosed for your review. Unfortunately, Study Area 1, as it is identified in the report, remains uninvestigated because real estate access could not be granted quickly. This area will be investigated at a later date

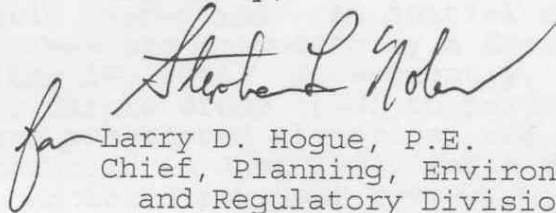
and included in the final version of the LGG report. Subsequently, it will be properly coordinated with your office at that time.

We have reviewed the draft report produced by Lopez Garcia Group and we agree with the firm's recommendations that none of the recorded archaeological sites (34OT103-107) and all but one of the recorded standing structures (Structures 1, 2, and 4-15) are not individually eligible for listing on the National Register (NRHP). However, we also agree with Lopez Garcia Group that nearly all of these sites and structures (minus Structures 5, 6, 10, and 15) may be contributing elements to a potential National Register historic district, based on their association with the historic Tri-State mining district. In fact, there may be numerous contributing elements to such a district - perhaps eligible on a thematic basis - but this is unconfirmed because there is no complete inventory of historic properties in the area. In addition to a potential NRHP-eligible historic district, we concur with LGG that one standing structure, Structure 3, is individually eligible for listing on the NRHP under Criterion C.

Based on these investigations, we believe there will be "no adverse effect" for historic properties within these project areas in the vicinity of the Picher-Cardin area. To support this position, Tulsa District has ensured that all engineering plans and specifications call for all historic standing structures and historic structural features to be left unmodified and in place. Exceptions to this include mine shaft openings and chat piles, which are central to project remediation goals and represent health hazards.

We greatly appreciate your willingness to expedite these pilot projects and understand that a full cultural resources study of the Picher-Cardin area will be necessary and essential for the progression of the Corps of Engineers' environmental remediation program. We request your review of the enclosed report and your comment on our finding of "no adverse effect." If you have any questions, please contact Mr. Ken Shingleton at 918-669-7661.

Sincerely,

for Larry D. Hogue, P.E.
Chief, Planning, Environmental
and Regulatory Division

Enclosures



Oklahoma Archeological Survey

THE UNIVERSITY OF OKLAHOMA

July 2, 2004

Larry D. Hogue
Chief, Planning, Environmental,
and Regulatory Division
Department of the Army
Corps of Engineers Tulsa District
1645 South 101st East Avenue
Tulsa, OK 74128-4609

Re: Hazard mitigation – Tar Creek Superfund project. Legal Description:
NW ¼ SW ¼ SW ¼ Section 28, N ½ NE ¼ Section 20 T29N R23E;
E ½ Section 36 T29N R22E; SE ¼ NW ¼ NE ¼ SW ¼ Section 20
T29N R23E, Ottawa County, Oklahoma.

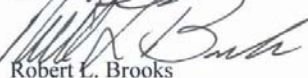
Dear Mr. Hogue:

I have received a report documenting the results of a cultural resource inventory undertaken as a pilot study for the assessment of potential effects in mediation of the Tar Creek Superfund project. It is recognized that this is a pilot study and does not constitute the final action and results of the project. It is also acknowledged that Study Area was inaccessible at the time of the field survey and will be investigated at a later date.

Field investigations for the Tar Creek Superfund project were undertaken by personnel of the LopezGarcia Group from June 7-10, 2004. The examination of some 57 acres representing the pilot study of potential effect resulted in the documentation of five previously recorded archaeological sites (34OT103-107) and 15 structures of architectural character. All these represent historic cultural resources. **Being historic sites and structures, I defer opinion on this study – potential eligibility to the National Register and potential effects to the Historic Preservation Office.**

This review has been conducted in cooperation with the State Historic Preservation Office, Oklahoma Historical Society.

Sincerely,



Robert L. Brooks
State Archaeologist

Cc: SHPO
LopezGarcia Group
Peoria Tribe
Osage Tribe
Quapaw Tribe



Oklahoma Historical Society

Founded May 27, 1893

State Historic Preservation Office • 2704 Villa Prom • Shepherd Mall • Oklahoma City, OK 73107-2441
Telephone 405/521-6249 • Fax 405/947-2918

July 22, 2004

Mr. Larry Hogue
Chief of Operations, CESWT-OD
Tulsa District Corps of Engineers
1645 South 101 East Avenue
Tulsa, OK 74128-4609

RE: File #1972-04; Tar Creek Superfund, Five Pilot COE Sites,
Ottawa County

Dear Mr. Hogue:

We have reviewed the submitted Lopez Garcia archeological survey report titled "Cultural Resources Investigations at Six Study Areas Within the Tar Creek Superfund Site". Based on the information presented in this report we cannot agree with your "no adverse effect" determination.

Chat piles and mine shaft openings cannot be excluded from the historic landscape when discussing mine properties or sites. We acknowledge that these particular features represent health hazards and need to be addressed; however, they need to be adequately documented and evaluated along with the other mine features. Modification of these elements has to be viewed as an adverse effect to potential eligible National Register of Historic Places properties.

We have discussed the situation with Ken Shingleton of your staff and are in agreement that this issue can be satisfactorily resolved through development of a Memorandum of Agreement.

Thank you for the opportunity to review this project. If you have any questions, please call Charles Wallis, Historical Archeologist, at 405/521-6381. Please reference the above underlined file number when responding. Thank you.

Sincerely,

Melvena Heisch
Deputy State Historic
Preservation Officer

MH:bh



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

August 6, 2004

Planning, Environmental and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. Don L. Klima, Director
Office of Planning and Review
Advisory Council on Historic Preservation
12136 West Bayaud Ave., Suite 330
Lakewood, CO 80228

Dear Mr. Klima:

This letter is to notify you of a determination of adverse effect to historic properties, as required under Section 106 of the National Historic Preservation Act of 1966 (as amended) and 36 CFR Part 800. The undertakings include a series of five small pilot projects located in the vicinity of the towns of Picher and Cardin, northeast Oklahoma, otherwise known as a part of the Tri-State Mining District or the Tar Creek Superfund Site. The U.S. Army Corps of Engineers has been authorized to initiate certain small-scale environmental remediation measures in Section 111 of the Energy and Water Development Appropriation Act of 2004 (PL 108-137). The purpose of these small scale projects is to evaluate a variety of remediation technologies for potential future implementation. The project areas (see enclosed map) are located in Sections 20, 28, and 29, Township 29 North, Range 23 East; Section 36, Township 29 North, Range 22 East; and Section 7, Township 28 North, Range 22 East, in Ottawa County, Oklahoma.

The five proposed pilot remediation projects include the following: (1) construct a diversion channel to assist in passive treatment of stormwater drainage; (2) plug/secure two mine shafts; (3) mitigate unvegetated mining spoils between Boys and Girls Club and Picher-Cardin schools; (4) mitigate unvegetated mining spoils by using them to fill a subsidence pond; and (5) mitigate unvegetated mining spoils between residences and the Kenoyer chat pile by creating a "green buffer zone".

In accordance with Section 106, the U.S. Army Corps of Engineers, Tulsa District initiated fieldwork in June 2004 to identify historic properties. An initial surface reconnaissance of all five areas was conducted by a Corps of Engineers archaeologist on May 19, 2004. Subsequently, Tulsa District contracted LopezGarcia Group (LGG) to perform the majority of the fieldwork and associated historical and archival research. A draft report of these investigations is enclosed for your review. Unfortunately, Study Area 1, as it is identified in the report, remains uninvestigated because real estate access could

not be granted quickly. This area will be investigated at a later date and included in the final version of the LGG report. Subsequently, it will be properly coordinated with the Oklahoma State Historic Preservation Office (SHPO) and your office at that time.

Also enclosed are copies of our formal coordination (to date) with the Oklahoma SHPO, Oklahoma Archeological Survey, and a number of Native American tribes. Consultation with the SHPO has resulting in a departure from our original collective position of "no adverse effect" as stated in our June 25, 2004 letter to Dr. Bob Blackburn.

Based on this consultation, we believe that there is a strong potential for the Picher-Cardin area - and perhaps even a much larger area extending into Kansas and Missouri - to be determined a National Register historic district based on the theme of historic lead and zinc mining. Such a historic district has not yet been defined, and therefore it is difficult to fully determine a suite of associated contributing elements. However, we feel confident that most of the historic archaeological features described in the enclosed report define contributing elements to such a historic district. We also believe that the full development of a historic context of the area and an accounting of contributing elements is the most appropriate next step in the assessment of the effects of federally funded activities on these resources.

Because most of these sites and associated features are presumed to be contributing elements - at this time - to a potential historic district, our review of proposed project activities leads us to believe that we will have an adverse effect on two particular classes of historic features. These include mine shafts and mine waste (chat) piles, which are integral to the remediation project and which represent hazards to human health. In these cases, the Corps of Engineers will be plugging mine shafts and removing or otherwise modifying chat piles, which will adversely affect the integrity of these features. All other historic archaeological features and standing structures described in the enclosed report will be avoided. We thus do not believe these potential contributing elements will be adversely affected by Corps activities.

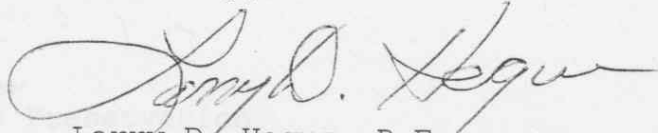
In order to resolve adverse effects, we have reached a tentative verbal agreement with the SHPO that existing documentation on file (enclosed report) is sufficient to offset the loss of the chat piles and mine shafts located within the five proposed project areas. A Memorandum of Agreement (MOA) to this effect will be drafted and executed to facilitate full compliance with the Section 106 process for these pilot projects.

We request that you advise us of the Advisory Council's expected role in the Section 106 consultation process for this

-3-

federal undertaking. Any guidance or assistance you may provide will be greatly appreciated. If you have any questions, please contact Mr. Ken Shingleton at 918-669-7661.

Sincerely,

A handwritten signature in dark ink, appearing to read "Larry D. Hogue". The signature is fluid and cursive, with a large initial "L" and "H".

Larry D. Hogue, P.E.
Chief, Planning, Environmental
and Regulatory Division

Enclosures



Preserving America's Heritage

August 25, 2004

Larry D. Hogue
Chief, Planning, Environmental,
And Regulatory Division
Corps of Engineers, Tulsa District
1645 South 101st East Avenue
Tulsa, OK 74128-4609

REF: *Tar Creek Superfund Site, Pilot Projects.*

Dear Mr. Hogue:

We received your notification and supporting documentation regarding the adverse effects of the referenced project on a property or properties eligible for inclusion in the National Register of Historic Places. Based upon the information you provided, we do not believe that our participation in consultation to resolve adverse effects is needed. However, should circumstances change, please notify us so we can re-evaluate if our participation is required. Pursuant to 36 CFR 800.6(b)(iv), you will need to file the Memorandum of Agreement, and related documentation at the conclusion of the consultation process. The filing of this Agreement with the ACHP is necessary to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with your notification of adverse effect. If you have any questions, please contact Margie Nowick at 969-5110 or via eMail at mnowick@achp.gov.

Sincerely,

Nancy Kochan
Office Administrator/Technician
Western Office of Federal
Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION

12136 West Bayaud Avenue, Suite 330 • Lakewood, Colorado 80228
Phone: 303-969-5110 • Fax: 303-969-5115 • achp@achp.gov • www.achp.gov



United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
Eastern Oklahoma Regional Office
P.O. Box 8002
Muskogee, OK 74402-8002



IN REPLY REFER TO:

Environmental, Safety
and Cultural Resources

AUG 3 1 2004

Mr. Ken Shingleton
U.S. Army Corps of Engineers, Tulsa District
1645 South 101st East Avenue
Tulsa, Oklahoma 74128-4609

Dear Mr. Shingleton:

Thank you for the opportunity to review the Memorandum of Agreement (MOA) between the U.S. Army Corps of Engineers, Tulsa District, and the Oklahoma State Historic Preservation Officer regarding five small-scale pilot environmental remediation projects in the vicinity of the Picher-Cardin lead and zinc mining area, Ottawa County, Oklahoma. The Bureau of Indian Affairs, Eastern Oklahoma Regional Office, offers the following comments:

The MOA recognizes that implementing the proposed projects will cause the loss of historic features and directs in Stipulation II that all other historical structures and structural remains be avoided. It is suggested that a list of the features identified in each site and the impacts of the proposed projects to these features be attached to assist in understanding the effects of the proposed undertaking. Additionally the state site forms should be updated after project completion.

Please clarify whether Stipulation II refers to sites 34OT103 and 34OT107 or sites 34OT103 through 34OT107.

If there are any questions, please contact Mr. Bob Coleman, Acting Division Chief, Division of Environmental, Safety and Cultural Resources, Eastern Oklahoma Regional Office, at (918) 781-4643.

Respectfully,

Regional Director

MEMORANDUM OF AGREEMENT
BETWEEN THE U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT
AND THE
OKLAHOMA STATE HISTORIC PRESERVATION OFFICER
REGARDING FIVE SMALL-SCALE PILOT ENVIRONMENTAL REMEDIATION
PROJECTS IN THE VICINITY OF THE PICHER-CARDIN LEAD AND ZINC
MINING AREA, OTTAWA COUNTY, OKLAHOMA

WHEREAS the U.S. Army Corps of Engineers, Tulsa District (USACE) plans to carry out five small-scale pilot environmental remediation projects in the vicinity of the Picher-Cardin Lead and Zinc Mining Area, Ottawa County, Oklahoma, otherwise known as part of the Tri-State Mining District or the Tar Creek Superfund Site, pursuant to the Energy and Water Development Appropriation Act of 2004 (P.L. 108-137); and

WHEREAS the undertaking consists of the following five small-scale pilot remediation projects: (1) construction of a diversion channel for passive treatment of stormwater drainage; (2) installation of plugs to secure two mine shaft openings; (3) mitigation of unvegetated mining spoils between Boys and Girls Club and Picher-Cardin schools; (4) mitigation of unvegetated mining spoils by using them to fill a subsidence pond; and (5) mitigation of unvegetated mining spoils between residences and the Kenoyer chat pile by creating a "green buffer zone"; and

WHEREAS, USACE has defined the undertaking's area of potential effect (APE) as selected portions of land (see map, Attachment A) located in Sections 20, 28, and 29, Township 29 North, Range 23 East; Section 36, Township 29 North, Range 22 East; and Section 7, Township 28 North, Range 22 East, in Ottawa County, Oklahoma; and

WHEREAS, USACE and the Oklahoma State Historic Preservation Officer (SHPO) agree that information available in standard published sources establish the significance of the lead and zinc mining industry in northeast Oklahoma and that site visits to the area by USACE and SHPO representatives confirm the presence of numerous historic resources; and

WHEREAS, USACE and the SHPO agree that a formal study to identify and evaluate archeological and historic resources in the lead and zinc mining area is needed to confirm precise boundaries of one or more districts potentially eligible for the National Register of Historic Places but that the time allotted for implementation of the five pilot projects makes such a cultural resources investigation infeasible at this time, and

WHEREAS, USACE has determined that the undertaking may have an adverse effect on historic mine waste (chat) piles and the entrances to mine shafts which may be contributing elements to an as yet undefined historic district that may be eligible for listing in the National Register of Historic Places, and has consulted with the Oklahoma Historic Preservation Officer (SHPO) pursuant to 36 C.F.R. Part 800, of the regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f); and

WHEREAS, USACE has consulted with the U.S. Department of the Interior, Bureau of Indian Affairs (BIA), Eastern Oklahoma Region, regarding the effects of the undertaking on historic properties located on federal trust lands managed by the BIA (two of the five project areas), and has invited the agency to sign this MOA as an invited signatory; and

WHEREAS, in accordance with 36 C.F.R. § 800.6(a)(1), USACE has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified documentation and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

NOW, THEREFORE, USACE and the SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

USACE shall ensure that the following measures are carried out.

I. USACE shall utilize existing information on file for mine shaft openings and mine spoilage (chat) piles within the APE as sufficient documentation to offset the loss of these historic features. The USACE provided this documentation to the SHPO on June 25, 2004, and it is incorporated in the report "*Cultural Resources Investigations at Six Study Areas within the Tar Creek Superfund Site*" (including background material, the SHPO's "Historic Preservation Resource Identification Forms," and photographs). The SHPO accepts this documentation on file in its office as adequate mitigation of the adverse effects of the pilot projects.

II. USACE shall avoid all other historical structures and structural remains located within and/or near the APE, defined in existing documentation as sites 34OT103 through 34OT107 and standing structures 1 through 15.

III. DURATION

This MOA will be null and void if its terms are not carried out within five (5) years from the date of its execution. Prior to such time, USACE may consult with the other

signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation V below.

IV. DISPUTE RESOLUTION

Should any signatory or concurring party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, USACE shall consult with such party to resolve the objection. If USACE determines that such objection cannot be resolved, USACE will:

A. Forward all documentation relevant to the dispute, including the USACE's proposed resolution, to the ACHP. The ACHP shall provide USACE with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, USACE shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. USACE will then proceed according to its final decision.

B. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, USACE may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, USACE shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA, and provide them and the ACHP with a copy of such written response.

C. USACE's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

V. AMENDMENTS

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

VI. TERMINATION

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation V, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the undertaking, USACE must either (a) execute an MOA pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. USACE

shall notify the signatories as to the course of action it will pursue.

Execution of this MOA by the USACE and SHPO and implementation of its terms evidence that USACE has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

SIGNATORIES:

U.S. Army Corps of Engineers, Tulsa District




7 SEP 04 Date

Miroslav P. Kurka

Colonel, U.S. Army District Engineer

Oklahoma State Historic Preservation Officer


9-13-04 Date

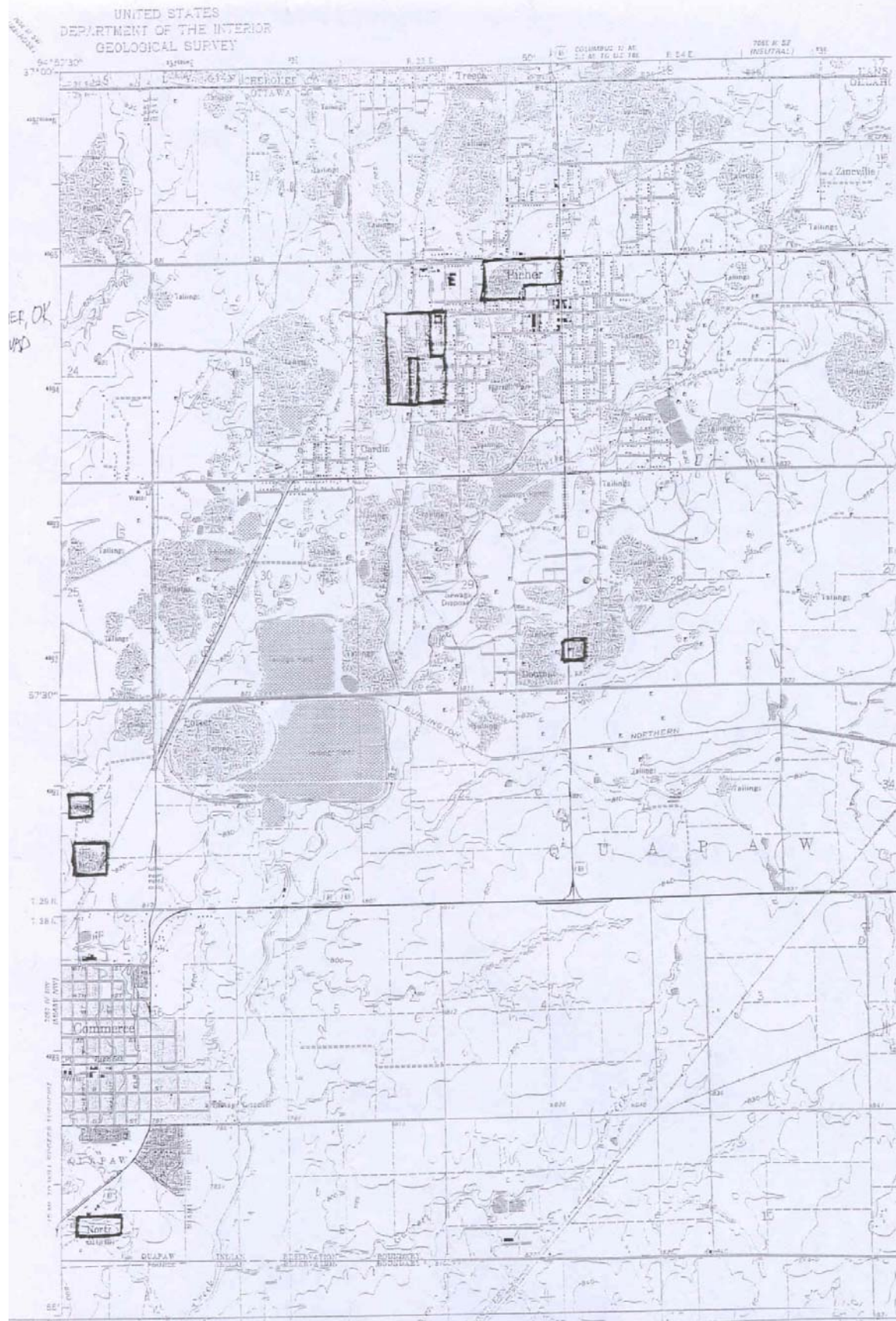
Dr. Bob Blackburn

INVITED SIGNATORY:

U.S. Department of the Interior, Bureau of Indian Affairs, Eastern Oklahoma Region

Date

Ms. Jeanette Hanna, Regional Director





Oklahoma Historical Society

Founded May 27, 1893

State Historic Preservation Office • 2704 Villa Prom • Shepherd Mall • Oklahoma City, OK 73107-2441

Telephone 405/521-6249 • Fax 405/947-2918

October 28, 2004

Col. Miroslav T. Kurka
Tulsa District Corps of Engineers
1645 South 101st East Avenue
Tulsa, OK 74128

RE: Oklahoma State Historic Preservation Office Withdrawal from Consultation under
Section 106 of the National Historic Preservation Act for the Tar Creek Superfund
Projects

Dear Col. Kurka:

Please accept this correspondence as notification that the Oklahoma State Historic Preservation Office has officially withdrawn from consultation under Section 106 of the National Historic Preservation Act for all federal undertakings associated with the Tar Creek Superfund clean-up effort. The Tulsa District Corps of Engineers and all other agencies involved in these federal undertakings should now consult directly with the Advisory Council on Historic Preservation at their Western Office of Project Review, 12136 West Bayaud Avenue, #330, Lakewood, CO 80228. The contact person with the Council is Margie Nowick at 303/969-5110 or mnowick@achp.gov.

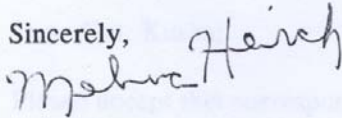
As you are aware, we participate in the Section 106 review process in accordance with the Advisory Council on Historic Preservation's regulations (36 CFR Part 800). Due to the short timeframe for execution of numerous (at least forty) Tar Creek clean-up projects just brought to our attention and the lack of adequate information about historic properties that may be affected by these undertakings, we cannot provide reasonable conclusions about the significance of historic resources nor responsible recommendations about appropriate mitigation measures for those resources that are eligible for the National Register of Historic Places and that may be adversely affected by these projects. Since May, we have endeavored to assist the Corps of Engineers and other agencies to expedite several pilot projects for Tar Creek. We made this effort in consultation with the Advisory Council on Historic Preservation and with the understanding that an appropriate study (see 36 CFR Part 800.4) of the project area would be undertaken before additional projects would be reviewed.

Col. Kurka
October 28, 2004,
Page 2

It is now our understanding that there is no timetable for the study of historic resources, but that many construction projects must be carried out almost immediately. In light of this situation and the numerous agencies involved, we have concluded that we can no longer have any meaningful input into these projects.

We want to express our appreciation for the diligent efforts of Ken Shingleton of your staff over the last several months to work on the Section 106 issues surrounding the Tar Creek projects. If you or members of your staff may have questions, please do not hesitate to contact me directly at 405/522-4484 or mheisch@ok-history.mus.ok.us.

Sincerely,



Melvena Heisch
Deputy State Historic
Preservation Officer

MH:pm

cc: Mary Jane Calvey (Oklahoma DEQ)
Jeanette Hanna (Regional Director Muskogee BIA)
Miles Tolbert (Oklahoma's Secretary of Environment)

✓ bcc: Ken Shingleton



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

OCT 29 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. Don L. Klima, Director
Office of Planning and Review
Advisory Council on Historic Preservation
12136 West Bayaud Ave., Suite 330
Lakewood, CO 80228-2115

Dear Mr. Klima:

This letter is to notify you that the U.S. Army Corps of Engineers, Tulsa District is proposing emergency undertakings within the Tar Creek Superfund Site, which is located in the vicinity of the towns of Picher and Cardin, northeast Oklahoma. The proposed emergency undertakings consist of plugging and capping eleven mineshaft openings which represent an immediate hazard to human life because of proximity to other human activities, or because of physical characteristics of the shafts themselves. These mineshafts represent a small subset of well over 1,000 shafts estimated to be present in the area and have specifically been identified by the local communities as immediate hazards to human life. The proposed mineshafts (see enclosed map) are located in Sections 16, 17, 20, 29, 30, and 33, Township 29 North, Range 23 East, in Ottawa County, Oklahoma.

In accordance with Section 106 of the National Historic Preservation Act of 1966 (as amended), Tulsa District consulted with the Oklahoma State Historic Preservation Office (SHPO) and initiated fieldwork in June 2004 to identify historic properties within several small areas where pilot projects were planned. Draft reports of "Cultural Resources Investigations at Six Study Areas within the Tar Creek Superfund Site" were subsequently provided to the SHPO and to your office. In accordance with SHPO guidance, Tulsa District drafted a Memorandum of Agreement (MOA) with the SHPO and the Bureau of Indian Affairs, Eastern Oklahoma Region (BIA) accepting existing documentation on file (the previously mentioned report) as sufficient to offset the loss of potential historic properties within these project areas. To date, Tulsa District and the SHPO have signed the MOA (copy enclosed), but the BIA has still not done so.

Based on this consultation and fieldwork, we believe there is a strong potential for the Picher-Cardin area to be determined a National Register historic district based on the theme of historic lead and zinc mining. Such a historic district has not yet been fully defined, and therefore it is difficult to fully determine a suite of associated contributing elements. However, many historic archaeological features within the area


and perhaps other associated standing structures may define contributing elements to such a historic district. We also believe that the full development of a historic context of the area and an accounting of contributing elements is necessary and appropriate, and Tulsa District is currently in the process of acquiring funds to undertake these efforts (see enclosed draft Scope of Work.)

Because most of these sites and associated features are presumed to be contributing elements, at this time, to a potential historic district, our review of proposed project activities leads us to believe that we may have an adverse effect on two particular classes of historic features. These include mine shafts and mine waste (chat) piles, which are integral to the remediation project and which represent immediate hazards to human health. In these cases, the Corps of Engineers will be plugging mine shafts and in some instances utilizing chat as fill, therefore adversely affecting the integrity of these features. All other historic archaeological features and standing structures described will be avoided.

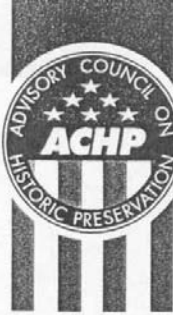
Prior to plugging and capping each mine shaft, Tulsa District will ensure that these features, including surrounding chat piles, are photographed and described. Discussions of each mine, including specific historical details, will be included in the thematic study of the Picher-Cardin area. Concurrently, Tulsa District is seeking authorization to spend appropriate project funds on this thematic study. Lastly, Tulsa District is drafting a Programmatic Agreement to address the treatment of particular historic features in the Picher-Cardin area, specifically mines and chat piles.

In accordance with Section 800.12 of 36 CFR Part 800, Protection of Historic Properties, Tulsa District requests your comment on these proposed actions, which we are planning to begin in the third week of November 2004. Additionally, any guidance or assistance you may provide will be greatly appreciated. If you have any questions, please contact Mr. Ken Shingleton at 918-669-7661.

Sincerely,


Miroslav P. Kurka
Colonel, U.S. Army
District Engineer

Enclosures



Preserving America's Heritage

November 5, 2004

Colonel Miroslav Kurka
District Engineer
Tulsa District, Army Corps of Engineers
1645 South 101st East Avenue
Tulsa, OK 74128-4609

REF: *Tar Creek Superfund Project, abandoned mines 7, 9, 11, 12, 15, 20, 27, 37, 49, 57 in sections 16, 17, 20, 29, 30, and 33, Township 29 North, Range 23 East, Ottawa County, Oklahoma*

Dear Colonel Kurka:

On November 1, 2004, we received your letter notifying us that the Tulsa District proposes the emergency plugging and capping of the referenced eleven abandoned mineshafts because they are immediate hazards to human life. As the Corps has determined that these are emergency undertakings, our comments were requested pursuant to 36 CFR 800.12. We have no objection to the Corps implementing these emergency actions as proposed. We do note that 36 CFR 800.12(b) requires the Corps to notify Indian tribes that may attach religious and cultural significance to historic properties that may be affected by emergency undertakings and to afford them seven days to comment on the emergency undertakings.

We are pleased that the Corps is developing a Programmatic Agreement (PA) to address the treatment of abandoned mines and chat piles in the Picher-Cardin area and achieve compliance with section 106 of the National Historic Preservation Act (16 U.S.C. 470f). We fully endorse such an agreement and will work with you in its development. We believe that a PA for cleanup activities within the entire Tar Creek Superfund site would greatly expedite and facilitate this critical public health and environmental project and result in more common sense, consistent, and cost-effective historic preservation efforts. Having a PA is especially critical in the face of complications posed by the Oklahoma State Historic Preservation Officer's (SHPO) recent withdrawal from consultations with all Federal agencies regarding section 106 compliance for the entire Tar Creek Project.

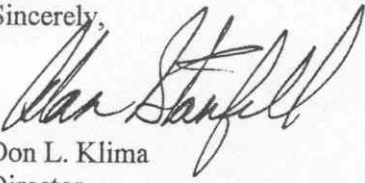
We are aware that the U.S. Environmental Protection Agency, U.S. Department of Housing and Urban Development, and the Bureau of Indian Affairs also have undertakings related to the Tar Creek Project and are working in partnership with the Oklahoma Department of Environmental Quality, Quapaw Tribe, and the University of Oklahoma. We encourage the Corps to seek the involvement of these other Federal agencies and partners in developing this PA so that it will be a truly multi-agency effort and expedite section 106 compliance for the entire Tar Creek Project. As always, we are ready to assist the Corps and other involved parties in this effort.

ADVISORY COUNCIL ON HISTORIC PRESERVATION

2004-2005
12136 West Bayaud Avenue, Suite 330 • Lakewood, Colorado 80228
Phone: 303.940.5110 • Fax: 303.940.5115 • www.achp.gov

If you have questions or wish to discuss this further, please do not hesitate to contact Margie Nowick at 303/969-5110 or via email at mnowick@achp.gov.

Sincerely,


for Don L. Klima
Director
Office of Federal Agency Programs

The following letter was sent to the various tribes listed in Appendix A.



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

November 9, 2004

Planning, Environmental, and Regulatory Division
Environmental Analysis and Compliance Branch

Mr. Larry Joe Brooks, Chief
Delaware Tribe of Indians of Oklahoma
220 NW Virginia Ave.
Bartlesville, OK 74003

Dear Chief Brooks:

In accordance with Section 106 of the National Historic Preservation Act of 1966 (as amended), this letter is to notify you that the U.S. Army Corps of Engineers, Tulsa District is proposing emergency undertakings within the Tar Creek Superfund Site, which is located in the vicinity of the towns of Picher and Cardin, northeast Oklahoma. The proposed emergency undertakings consist of plugging and capping eleven mineshaft openings which represent an immediate hazard to human life because of proximity to other human activities, or because of certain physical characteristics of the shafts themselves. The proposed mineshafts (see enclosed map) are located in Sections 16, 17, 20, 29, 30, and 33, Township 29 North, Range 23 East, in Ottawa County, Oklahoma.

In June 2004 Tulsa District initiated fieldwork to identify historic properties within several small areas where pilot projects were planned. Based on this work, we believe that there is a strong potential for the Picher-Cardin area to be determined a National Register historic district based on the theme of historic lead and zinc mining. Such a historic district has not yet been fully defined, and therefore it is difficult to fully determine a suite of associated contributing elements. However, many historic archaeological features within the area and perhaps other associated standing structures may define contributing elements to such a historic district. We also believe that the full development of a historic context of the area and an accounting of contributing elements is necessary and appropriate, and Tulsa District is currently in the process of acquiring funds to undertake these efforts.

In accordance with Section 800.12(b) of 36 CFR Part 800, Protection of Historic Properties, Tulsa District requests your comment on these proposed actions, which we are planning to begin in the third week of November 2004. Please review these areas for information that you may be willing to share with us on any potential religious and cultural significance of these historic properties.

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Information you may be able to provide will assist us in assessing the effects of these emergency undertakings. If you have any questions, please contact Mr. Ken Shingleton at 918-669-7661.

Sincerely,

Louis E. Vogele, Jr.

/s/

G. David Steele, P.E.
Chief, Planning, Environmental,
and Regulatory Division

Enclosure

PA Regarding the Tar Creek/Picher Field Mine Cleanup Project

PROGRAMMATIC AGREEMENT

AMONG

THE U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT;
BUREAU OF INDIAN AFFAIRS, EASTERN OKLAHOMA REGION;
ENVIRONMENTAL PROTECTION AGENCY;
U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT;
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY;
THE QUAPAW TRIBE OF OKLAHOMA (O-GAH-PAH);
OKLAHOMA STATE HISTORIC PRESERVATION OFFICE;
OKLAHOMA ARCHEOLOGICAL SURVEY;

AND

THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING
THE TAR CREEK/PICHER FIELD CLEANUP PROJECT,
OTTAWA COUNTY, OKLAHOMA

WHEREAS, the U.S. Army Corps of Engineers, Southwestern Division, Tulsa District (Army Corps); Bureau of Indian Affairs (BIA); Environmental Protection Agency (EPA); and the U.S. Department of Housing and Urban Development (HUD) (agencies) propose to fund, assist, plan, construct, approve, permit, and otherwise facilitate, wholly or in part, numerous and varied hazard mitigation and environmental remediation activities in the vicinity of the Picher-Cardin Lead and Zinc Mining Area, Ottawa County, Oklahoma, part of the Tri-State Mining District and including the Tar Creek Superfund Site; and

WHEREAS, the agencies may fund, plan, implement, approve, or otherwise facilitate, wholly or in part, a wide variety of hazard mitigation and remediation activities in the Picher-Cardin Lead and Zinc Mining Area, including (but not limited to): (1) plugging and/or capping mine shaft openings; (2) removing, redistributing, processing or washing mine waste (chat) and/or approving the sales and removals, redistributions, and processing or washing of mine waste (chat), and approving Temporary Operating Permits or other permits and leases related to remediation activities; (3) filling surface depressions, ponds, or mine pits; (4) leveling, removing, or otherwise utilizing the footings, foundations, and other remains associated with historic mining activities; (5) removing soil, mining waste, or other surface debris and replacing it with new soil; (6) planning and constructing projects designed to improve the quality of running water and/or groundwater in the encompassing watersheds; (7) stream and habitat restoration activities, (8) monitoring, testing, planning and other support activities related to the hazard mitigation and remediation activities; and (9) post-remediation reclamation, all of which collectively and/or

individually may be undertakings subject to review under Section 106 of the National Historic Preservation Act, as amended (16 U.S.C. 470f) and shall be known as "undertakings" or "activities" for the purposes of this Agreement; and

WHEREAS, the agencies, in consultation with the Oklahoma State Historic Preservation Office (SHPO) and the Quapaw Tribe of Oklahoma, agree that information available in standard published sources establish the historical significance of the lead and zinc mining industry in northeast Oklahoma and that site visits confirm the presence of numerous features, such as ruins and buildings, that may be eligible for the National Register of Historic Places (National Register); and

WHEREAS, the agencies have determined that the undertakings, both present and as may be defined in the future, may have an adverse effect on historic properties, known or as may be identified in the future, and have consulted with the Advisory Council on Historic Preservation (ACHP), the SHPO, and the Quapaw Tribe of Oklahoma, to develop and implement this agreement (Agreement) in accordance with 36 CFR 800.14(b) for compliance with Section 106 of the National Historic Preservation Act, as amended (16 U.S.C. 470f), with the goal of expediting these undertakings in the interests of public health and safety and environmental benefit and better addressing their direct, indirect, and cumulative effects on historic properties; and

WHEREAS, the Oklahoma Department of Environmental Quality (ODEQ) plans, coordinates, and carries out many of these undertakings and activities in cooperation with and as delegated by the agencies, will be considered to be one of the agencies for the purposes of this Agreement to the extent that the other agencies delegate tasks and actions to DEQ; and therefore is a party and signatory to this Agreement; and

WHEREAS, the Quapaw Tribe of Oklahoma (O-Gah-Pah) (Quapaw Tribe) is a party and signatory to this Agreement because undertakings may occur on or affect historic properties within the Quapaw Tribe's jurisdiction, tribal trust lands, and/or individual allotments; because the Quapaw Tribe has strong and direct historical associations with zinc and lead mining in the Picher Field and vicinity; because the Quapaw Tribe may attach cultural and religious significance to historic properties that may be affected by these undertakings; because the Quapaw Tribe possesses special expertise regarding the religious and cultural significance that historic properties may have to the Quapaw Tribe; and because the agencies have consulted with the Quapaw Tribe on a government-by-government basis in the development of this Agreement and will continue to do so in its implementation; and

WHEREAS, the Army Corps, on behalf of the other agencies, has contacted all known Federally-recognized Indian tribes that may be associated with the Picher Field/Tar Creek project area, including the Caddo Tribe of Oklahoma, Cherokee Nation of Oklahoma, Delaware Tribe of Indians of Oklahoma, Eastern Shawnee Tribe of Oklahoma, Miami Tribe of Oklahoma, Modoc Tribe of Oklahoma, Osage Nation of Oklahoma, Ottawa Tribe of Oklahoma, Peoria Tribe of Indians of Oklahoma, Quapaw Tribe of Oklahoma, Seneca-Cayuga Tribe of Oklahoma, United Keetoowah Band of Cherokee Indians of Oklahoma, Wichita and Affiliated Tribes of Oklahoma, Wyandotte Tribe of Oklahoma (collectively, the tribes), to consult with the tribes on a government-to-government basis on the development of this Agreement and will continue to consult with the tribes in the implementation of this Agreement; and

WHEREAS, the Oklahoma Archeological Survey (OAS) is a party and signatory to this Agreement because, pursuant to a cooperative agreement with the SHPO, it maintains site files for archaeological sites located within the state of Oklahoma and provides professional expertise

in prehistoric (pre-contact) archaeology, such as opinions on National Register eligibility, effect determinations, and recommendations for mitigation of adverse effects to prehistoric archaeological sites; accordingly, signatories shall notify the SHPO and OAS simultaneously of requests for comments and other communications pursuant to this Agreement; and

WHEREAS, the U.S. Department of Housing and Urban Development's undertaking regarding the Tar Creek/Picher Field Cleanup Project is limited per the grant agreement for Neighborhood Initiatives Grant #B-04-NI-OK-0036, executed with the Oklahoma Department of Environmental Quality on July 27, 2004, and is limited to the amount of the fiscal year 2004 Congressional appropriation for such Grant. HUD's undertaking would also be limited per any future grant agreements for any future related appropriations mandated by Congress.

NOW, THEREFORE, the agencies, the Quapaw Tribe, SHPO, OAS, and ACHP agree that the undertakings shall be implemented in accordance with the following stipulations in order for the agencies to take into account the effects of those undertakings on historic properties.

STIPULATIONS

The agencies, individually and collectively, shall ensure that the following measures are carried out:

I. SCOPE OF THIS AGREEMENT

A. The geographical scope of this Agreement, or Area of Potential Effects (APE or project area) of Picher Field/Tar Creek cleanup and environmental remediation undertakings collectively, is the area bounded by the Kansas state line; the east side of the 100-year floodplain plus 100-foot buffer of the Spring River; the New State Road; the 100-year floodplain plus 100-foot buffer on the west side of Elm Creek; and the 100-year floodplain plus 100-foot buffer on both sides of Tar Creek to its confluence of the Neosho River. This approximately 40-square mile area is mostly within, but not necessarily limited to, the Picher-Cardin Field, located primarily in Township 29 North Ranges 23 and 24 East, and partly in Township 29 North Range 25 East and Township 28 North Ranges 23 and 24 East, Ottawa County, Oklahoma. The APE is depicted on the map in Attachment A of this Agreement.

B. Revisions to Geographical Scope. At the time of the annual meeting called for in stipulation XIII, an agency may propose revisions to the geographical scope of this Agreement to facilitate the cleanup. The signatories shall consult regarding the proposed revision, its benefit to facilitate undertakings, and the consequences of such revision for historic preservation considerations. The geographical scope of this Agreement may be revised after such consultation, consultation with consulting tribes, and the prior written concurrence of the signatory tribes, SHPO, OAS, and ACHP, and the agencies.

C. Scope of Undertakings. The purpose of this Agreement is to facilitate Section 106 compliance for hazard mitigation and environmental remediation undertakings in the Picher Field/Tar Creek project area to benefit public health and environmental safety. Therefore, a signatory agency may not use this Agreement to comply with Section 106 for undertakings that have other purposes, even if they occur within the cited geographical scope.

II. EXECUTION AND APPLICABILITY OF THIS AGREEMENT

A. This Agreement may be signed in counterparts with the same effect as if the signature

on each such counterpart were upon the same instrument.

B. This Agreement will go into effect when the ACHP has signed it and has received (via facsimile or mail) from the SHPO, OAS, the Quapaw Tribe, and at least one of the Federal agencies, a copy of the Agreement with their signature on their respective signature pages.

C. Once the Agreement has gone into effect, it will apply to those agencies that have submitted to the ACHP (via facsimile or mail) a copy of the Agreement with their signature on their respective signature pages. Each such agency shall be bound by the terms of the Agreement regardless of the actions or omissions of the other agencies.

D. Each agency is responsible for its own compliance with the terms of this Agreement. Nothing in this Agreement shall be construed to impute liability on any agency for the actions of any other agency.

III. CERTAIN ENVIRONMENTAL REMEDIATION ACTIVITIES WITHOUT FURTHER REVIEW

A. List of Exempt Undertakings

The agencies that have signed this Agreement may proceed with the following environmental remediation activities immediately and without any further Section 106 review, subject to stipulations VII and XV:

1. Filling and closing mine shaft openings. (It is agreed by all parties that mine shaft openings will be filled and closed regardless of any historical significance that they may or may not have.)
2. Removing and replacing or redistributing soil within the core area delineated in Attachment B.
3. Approving the sale and removal or redistribution, processing or washing of mine waste (chat), and any subsequent removal or distribution of said mine waste (chat). (It is agreed by all parties that mine waste (chat) will be removed, sold, redistributed, processed, washed, and/or any other remediation action regardless of any historical significance that such mine waste (chat) may or may not have.)
4. Removing or redistributing concrete footings and foundations.
5. Filling tailings ponds with mine waste (chat) or concrete debris.
6. Removing concrete, metal, wood, or other debris.
7. Paving or repaving gravel or chat roads, including removal of existing road surfaces and repaving them and the study of maximum chat utilization in asphalt through the establishment, maintenance, and evaluation of a pavement test road.
8. Cleanup, habitat restoration, or other work near or along streams within core area delineated in Attachment B.
9. Granting of Temporary Operating Permits or other permits and leases by the BIA for exempt remediation activities, including but not limited to mine shaft closure and mine waste (chat) removals or redistributions, on trust or restricted

Indian lands.

10. Monitoring of remediation and restoration through collection and analysis of environmental data to document changes brought about by remediation and restoration activities.

11. Passive treatment systems for treatment of mine seep.

Notwithstanding any other provision of this Agreement, the parties hereto agree that mine waste (chat), contaminated soil and water, and open mine shafts present real or potential hazards to human health and the environment. Indeed, the goal of the Environmental Protection Agency's Administrative Order on Consent (December 2003), draft Remedial Investigation/Feasibility Study, and other activities associated with Operable Unit 4 set forth a plan and agreement to remove mine waste (chat) piles and close mine shaft openings. The use of motorized heavy equipment is understood as essential in the conduct of these activities.

B. Revisions of List of Exempt Undertakings.

At the time of the annual meeting called for in stipulation XIII, an agency may propose a revision to the list of exempt activities in stipulation III.A. to facilitate the cleanup. The signatories shall consult regarding the proposed revision, its benefit to facilitate undertakings, and the consequences of such revision for historic preservation considerations. Revision to this list may be made after consultation among the signatories at an annual meeting, consultation with consulting tribes, and with the prior written concurrence of the SHPO, OAS, ACHP, and signatory tribes.

IV. Non-Exempt Undertakings.

Agencies shall consult in accordance with subpart B of 36 CFR Part 800 regarding 1) undertakings that may affect buildings and standing structures and 2) activities that are not exempt (see stipulation III.A., or as may be revised).

V. LEAD AGENCY

The Army Corps shall be the designated lead agency and shall facilitate compliance with this Agreement.

VI. PICHER FIELD/TAR CREEK NATIONAL REGISTER EVALUATION

A. PICHER FIELD/TAR CREEK HERITAGE STUDY.

The Corps, on behalf of the agencies, shall carry out the necessary historical and field research for, and prepare the, the Picher Field/Tar Creek Heritage Study (Heritage Study). The Cultural Resources Technical Team (CRTT) described in stipulation XIII shall develop and submit the draft scope of work for the Heritage Study to the SHPO, the tribes, OAS, and ACHP for review and comment. These parties shall be afforded 30 days for this review and comment. The CRTT shall revise the scope of work to address the comments received. Described in more detail in Attachment C to this Agreement, the Heritage Study shall provide an overview of the APE with particular emphasis on delineated historical theme and sub-themes; describe historic property types with integrity guidelines; discuss the history of the area in terms of the National Register evaluation criteria; identify persons who would be good candidates for oral history

interviews; identify, evaluate, and propose historic properties worthy of possible preservation; and identify, evaluate, and propose historic properties worthy of field recordation. Additionally, the Study shall describe the history and resources of the Catholic 40.

B. The Corps, on behalf of the agencies, shall prepare a draft version of the Heritage Study, which shall be reviewed by the CRTT. When acceptable to the CRTT, and within 210 days of this Agreement coming into effect, the Corps, on behalf of the agencies, shall provide the draft version of the Heritage Study for review and comment by the SHPO, tribe, and ACHP. The study shall be revised and finalized by the Corps and CRTT, on behalf of the agencies, to address the comments received. All signatories to this Agreement shall be provided a copy of the final Heritage Study.

C. The Corps, on behalf of the agencies, and in consultation with the tribes, OAS, and SHPO, shall determine the National Register eligibility of the Picher Field/Tar Creek project area, based on the Study. Should there be disagreement on National Register eligibility, the Corps, on behalf of the other agencies, shall request a determination of eligibility from the Keeper of the National Register, whose determination shall be considered final.

VII. ARCHAEOLOGY

A. Archaeological sites are not anticipated to be found in the core Tar Creek/Picher Field area because of the extensive land modification associated with past mining. Outside this core area, there is potential for archaeological sites to be found. Each agency that proposes undertakings not on the exempt list (stipulation III.A.) or outside the APE shall comply with subpart B of 36 CFR Part 800 for those undertakings. The agencies shall comply with the Archeological Resources Protection Act (ARPA) (P.L. 96-95; 93 Stat. 721; 16 U.S.C. 470aa et seq.), applicable regulations, and archaeological laws and regulations of the State of Oklahoma, as applicable.

B. Regarding the procurement of clean fill from outside the core area, for maximum efficiency, it is recommended through the process in subpart B of 36 CFR Part 800 that agencies share established borrow areas to the extent possible. Once a borrow area has been determined to not contain historic properties, continued vertical excavation of that area for borrow will not require further Section 106 consideration regarding effects to archaeological sites.

VIII. CATHOLIC 40.

The signatories to this document conducting environmental remediation activities affecting historic properties on the Catholic 40 shall develop environmental remediation plans that will not disturb existing structures and that will have the least possible effects on the historic properties on the Catholic 40. The environmental remediation plans affecting historic properties on the Catholic 40 shall include archaeological treatment and discovery provisions to address those historical remains that may be affected and should include the advisement from the Quapaw Tribe and comments of the SHPO. The treatment and discovery provisions and manner of implementation shall meet the *Secretary of the Interior's Standards for Archeological Documentation*.

IX. GENERAL EFFORTS

*

It is recognized that the remediation of the Picher Field/Tar Creek area is essential, but will adversely affect historic properties within the Picher Field/Tar Creek area. To the extent possible, the agencies shall make reasonable and good-faith efforts to encourage the preservation and interpretation of historic properties and the history of the Picher Field/Tar Creek area for economic and educational benefit of the public. The agencies are encouraged to assist in preserving the historical (archival) records of the Picher Field/Tar Creek area and making them accessible to the researchers and the general public; encouraging the preservation of significant historic properties not affected by remediation (subject to willing property owners); and other measures.

X. POST-REMEDIATION RECLAMATION.

The agencies shall seek and take full advantage of opportunities to preserve historic properties and interpret them to the public as they contribute to the development of long-range land use plans and as they develop post-remediation reclamation activities in the Picher Field/Tar Creek project area. This may include encouraging heritage tourism to the Picher Field/Tar Creek area, and/or accepting or otherwise facilitating from willing property owners conservation easements, donations, or purchases of historic properties, or other actions. Revegetating areas with native grasses is of particular interest to the tribes. The agencies shall consult with the tribes regarding post-remediation reclamation activities that may affect historic properties of religious and cultural significance to them.

XI. PROFESSIONAL QUALIFICATIONS

All historic preservation-related activities called for in this Agreement shall be carried out by persons meeting the pertinent professional qualifications of the Secretary of the Interior's (SOI) *Professional Qualification Standards* (36 CFR Part 61) in a discipline appropriate for the task and the involved historic properties. The agencies acknowledge that tribes possess special knowledge and expertise related to historic properties of religious and cultural significance to them. It is understood that professional qualification standards do not apply to tribal traditional practitioners and authorities for purposes of this Agreement.

XII. PROFESSIONAL STANDARDS

All historic preservation work carried out pursuant to this Agreement shall meet the *Secretary of the Interior's Standards for Historic Preservation Projects*, including but not limited to Standards for Preservation, Rehabilitation, Archeological Documentation, Identification of Historic Properties, and Preservation Planning. Additionally, historic preservation work must meet the requirements of the SHPO and OAS.

XIII. CULTURAL RESOURCES TECHNICAL TEAM

Qualified cultural resource professionals of the agencies (Army Corps and BIA) and the tribes shall constitute the Tar Creek/Picher Field Cultural Resources Technical Team (CRTT). The CRTT shall provide technical assistance in implementing this Agreement, including but not limited to advising agencies as to whether undertakings fall under the list of exempted activities in stipulation III.A. Also, one or more members of the CRTT shall participate in the monthly agency project coordination meetings to provide input on historic preservation implications of proposed undertakings.

XIV. ANNUAL HISTORIC PRESERVATION COORDINATION MEETING AND ANNUAL REPORT

A. ANNUAL MEETING. In October 2005 and annually thereafter, the signatories to this Agreement shall meet to discuss progress in implementing the Agreement, projects (exempt and non-exempt) planned for the coming year, possible effects of such projects on historic properties, problems and successes in implementing the Agreement, and whether amendments to Agreement, its scope, list of exempted activities, or components are necessary. The Army Corps, on behalf of the agencies, shall organize these annual meetings.

B. ANNUAL REPORT. At least 30 days prior to the annual meeting, the Corps, with the cooperation of the agencies, shall prepare and submit to the SHPO, OAS, signatory tribes, and ACHP a report that describes the following: the undertakings of the past year (exempt and non-exempt); undertakings (exempt and non-exempt) anticipated for the coming year(s); possible effects of these undertakings on historic properties; the agencies' progress in implementing this Agreement; and actions that the agencies plan to take to implement the Agreement during the coming year. The report also shall identify problems and successes in carrying out the Agreement and proposed amendments to the Agreement, if any.

XV. INADVERTENT DISCOVERY

If historic properties (including pre-contact or pre-mining archaeological remains or burials or human remains) are found during conduct of project activities or if there are unanticipated effects on historic properties, the agency shall ensure that all activity in the minimum practicable immediate area necessary to protect the discovery is ceased, ensure the discovery is secured, and shall notify the SHPO, OAS, and the tribes within 48 hours of discovery. The notification shall describe the agency's assessment of National Register eligibility of the property and proposed actions to resolve the adverse effects. The SHPO, OAS, and tribes shall respond within 48 hours of the notification. The agency official shall take into account their recommendations regarding National Register eligibility and proposed actions, as it carries out appropriate actions to resolve the adverse effects. Failure to respond within 48 hours will be deemed as agreement with the agency's assessment and proposed actions. The agency shall provide to the SHPO, OAS, and the tribes a report of the actions to resolve the adverse effect when they are completed. Notification under this stipulation shall occur pursuant to a supplemental protocol to be prepared by all of the parties as soon as possible after the Agreement is signed.

A. If historic properties are discovered on Indian lands (tribal trust or individual restricted allotment), or there are unanticipated effects on historic properties found on such Indian lands, the agency shall comply with applicable tribal regulations and procedures, to the extent that such regulations and procedures are not inconsistent with applicable Federal law, and obtain the concurrence of the tribe with jurisdiction over the land, provided that seeking said consent is not inconsistent with applicable Federal law, on the proposed action. In addition, for a discovery on Indian or Federal lands, the agency shall comply with the Native American Graves Protection and Repatriation Act (NAGPRA [P.L. 101-601; 104 Stat. 3048; 25 U.S.C. Section 3001-13]) and its applicable regulations, the Archeological Resources Protection Act and its applicable regulations, and any other applicable tribal, federal, or state law.

B. For discoveries on non-Indian, non-Federal lands or State lands, applicable laws and regulations of the State of Oklahoma statutes shall be complied with. Such laws may include 21 O.S. Section 1168.4 (Duty to Report Discovered Remains); 21 O.S. Section 1167 (Punishment for Destruction or Removal of Tomb, Gravestone or other Cemetery Ornament); and, 21 O.S. Section 1168.7 (Government Agencies Discovery of Remains), or other applicable Federal or State law.

XVI. EMERGENCIES

Immediate rescue and salvage operations in response to an immediate threat to life or property, disaster, or other emergency formally declared by an agency official, a tribal government, the Governor of the state of Oklahoma, or the President are exempt from the provisions of Section 106. For such undertakings that will be implemented within 30 days after the threat, disaster, or an emergency is declared, the agency shall notify the ACHP, SHPO, and the tribes as soon as possible and afford them an opportunity to comment within five days of notification and take into account such timely comments prior to proceeding. If the agency determines that circumstances do not permit five days for comment, the agency shall notify these parties and invite any comments within the time available. An agency may request an extension of the period of applicability from the ACHP prior to the expiration of the 30 days.

XVII. DISPUTE RESOLUTION

Should any signatory or concurring party to this Agreement object at any time to any actions proposed or the manner in which the terms of this Agreement are implemented, the objector is encouraged to consult the other signatories, particularly the CRTT, SHPO, OAS, and signatory tribes, in resolving the objection. If that objector determines that such objection cannot be resolved, the relevant agency shall:

- A. Forward all documentation relevant to the dispute, including proposed resolution, to the ACHP. The ACHP shall provide the agency with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the agency shall prepare a written response that takes into account advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. The agency will then proceed according to its final decision.
- B. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, the agency may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the agency shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the Agreement, and provide them and the ACHP with a copy of such written response.
- C. The responsibility of the other agencies to carry out all other actions subject to the terms of this Agreement that are not the subject of the dispute remains unchanged.
- D. It is understood that this dispute resolution stipulation is intended to address issues of historic preservation and implementation of this Agreement, and not

matters pertaining to technical issues of public health and safety and environmental remediation.

XVIII. ADDITIONAL SIGNATORIES

Additional parties may become signatories to this Agreement in the future through an amendment to the Agreement per stipulation XX.B.

XIX. ANTI-DEFICIENCY ACT

It is understood that the implementation of this Agreement is subject to applicable Federal and State anti-deficiency statutes.

XX. DURATION, AMENDMENT, WITHDRAWAL, AND TERMINATION

A. DURATION. Unless terminated or amended as outlined below, this Agreement shall remain in effect for a period of 5 years from the date that the Agreement goes into effect and may be extended for additional five-year terms with the written concurrence of all of the signatories.

B. AMENDMENT. If any signatory to the Agreement determines that the Agreement cannot be fulfilled or that modification of the Agreement is warranted, that signatory shall consult with the other signatories to seek amendment of the Agreement. The Agreement may be amended after consultation among the signatories and all signatories agree in writing with such amendment.

C. WITHDRAWAL. Any agency may withdraw its involvement in this Agreement by providing 30 days written notice to the other parties, provided that the parties will consult during this period to seek amendments or other actions that would prevent withdrawal. Withdrawal of involvement in this Agreement by an agency will require that agency to comply with the process in subpart B of 36 CFR Part 800 for its undertakings. Should any signatory withdraw its involvement in this Agreement, the Agreement shall remain in effect for the other remaining signatories, provided the SHPO, OAS, Quapaw Tribe, ACHP, and at least one Federal agency remain as signatories.

D. TERMINATION. This Agreement will be fully terminated if any signatory provides notice of termination and after 90 days or more of unsuccessful consultations to amend the Agreement. This Agreement may also be terminated by the implementation of a subsequent Programmatic Agreement under 36 CFR Part 800 that explicitly supersedes this Agreement.

Execution of this Agreement and implementation of its terms evidence that the Federal agencies that have signed it have taken into account the effects of their undertakings on historic properties and have afforded the ACHP an opportunity to comment.

SIGNATORY PAGES (PAGE 1 OF 5)

ADVISORY COUNCIL ON HISTORIC PRESERVATION

BY: John M. Fowlie Date: 2/24/05

Print/Type Name: JOHN M. FOWLIE

Print/Type Title: EXECUTIVE DIRECTOR

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SIGNATORY PAGES (PAGE 2 OF 9)

OKLAHOMA STATE HISTORIC PRESERVATION OFFICER

BY: _____ Date _____

Print/Type Name: _____

Print/Type Title: _____

SIGNATORY PAGES (PAGE 3 OF 9)

OKLAHOMA ARCHAEOLOGICAL SURVEY

BY: _____ Date _____

Print/Type Name: _____

Print/Type Title: _____

SIGNATORY PAGES (PAGE 4 OF 9)

QUAPAW TRIBE OF OKLAHOMA (O-Gah-Pah)

BY: _____ Date _____

Honorable John L. Berrey, Chairman, Tribal Business Committee

Print/Type Name: _____

Print/Type Title: _____

SIGNATORY PAGES (PAGE 5 OF 9)

U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT

BY: Miroslav P. Kurka Date 25 FEB 05

Print/Type Name: COL Miroslav P. Kurka

Print/Type Title: Commander/District Engineer

SIGNATORY PAGES (PAGE 6 OF 9)

ENVIRONMENTAL PROTECTION AGENCY

BY: _____ Date _____

Print/Type Name: _____

Print/Type Title: _____

Page 16 of 22

SIGNATORY PAGES (PAGE 7 OF 9)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

BY: _____ Date _____

Print/Type Name: _____

Print/Type Title: _____

Page 17 of 22

SIGNATORY PAGES (PAGE 8 OF 9)

BUREAU OF INDIAN AFFAIRS

BY: _____ Date _____

Print/Type Name: _____

Print/Type Title: _____

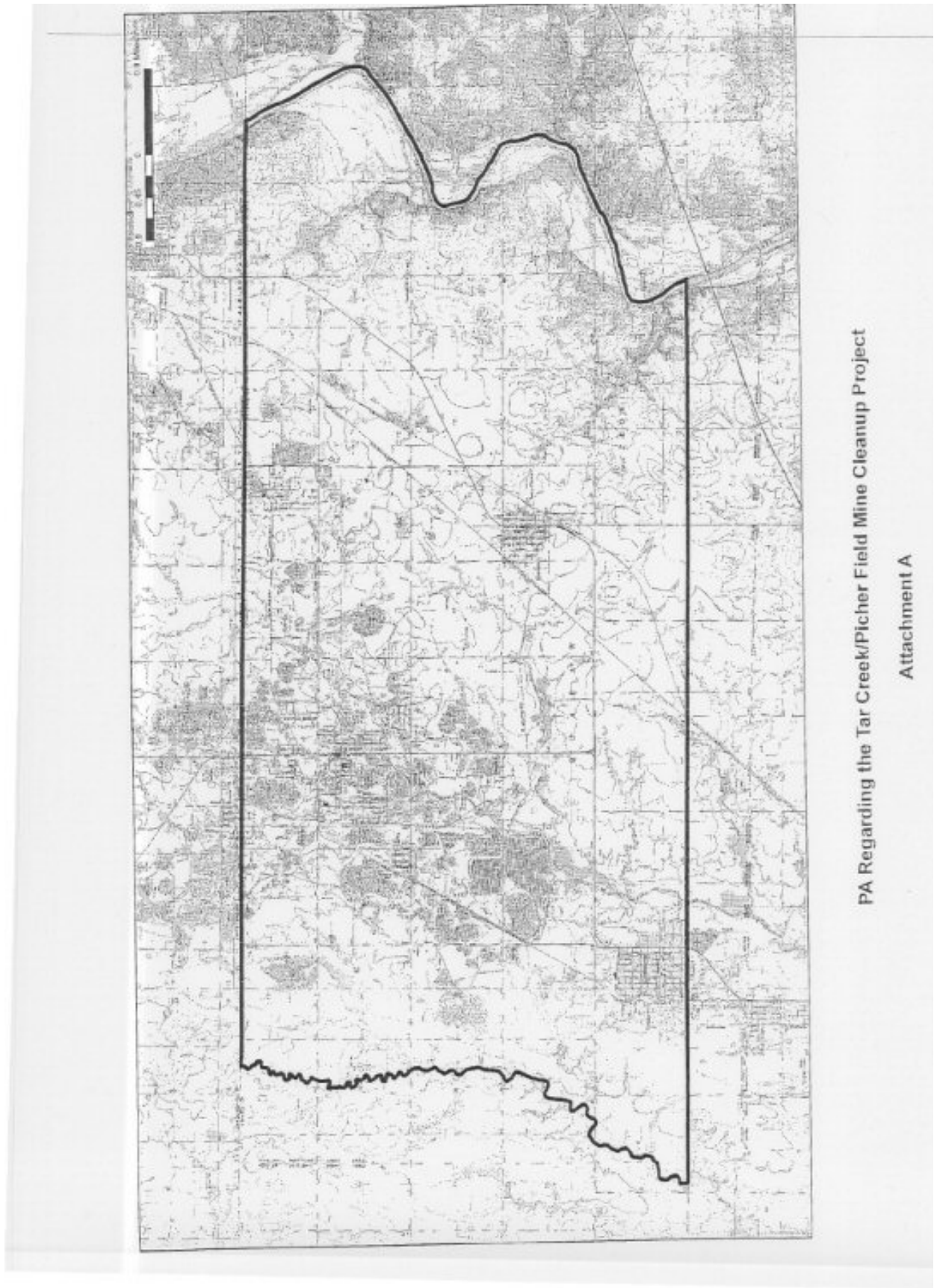
SIGNATORY PAGES (PAGE 9 OF 9)

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

BY: _____ Date _____

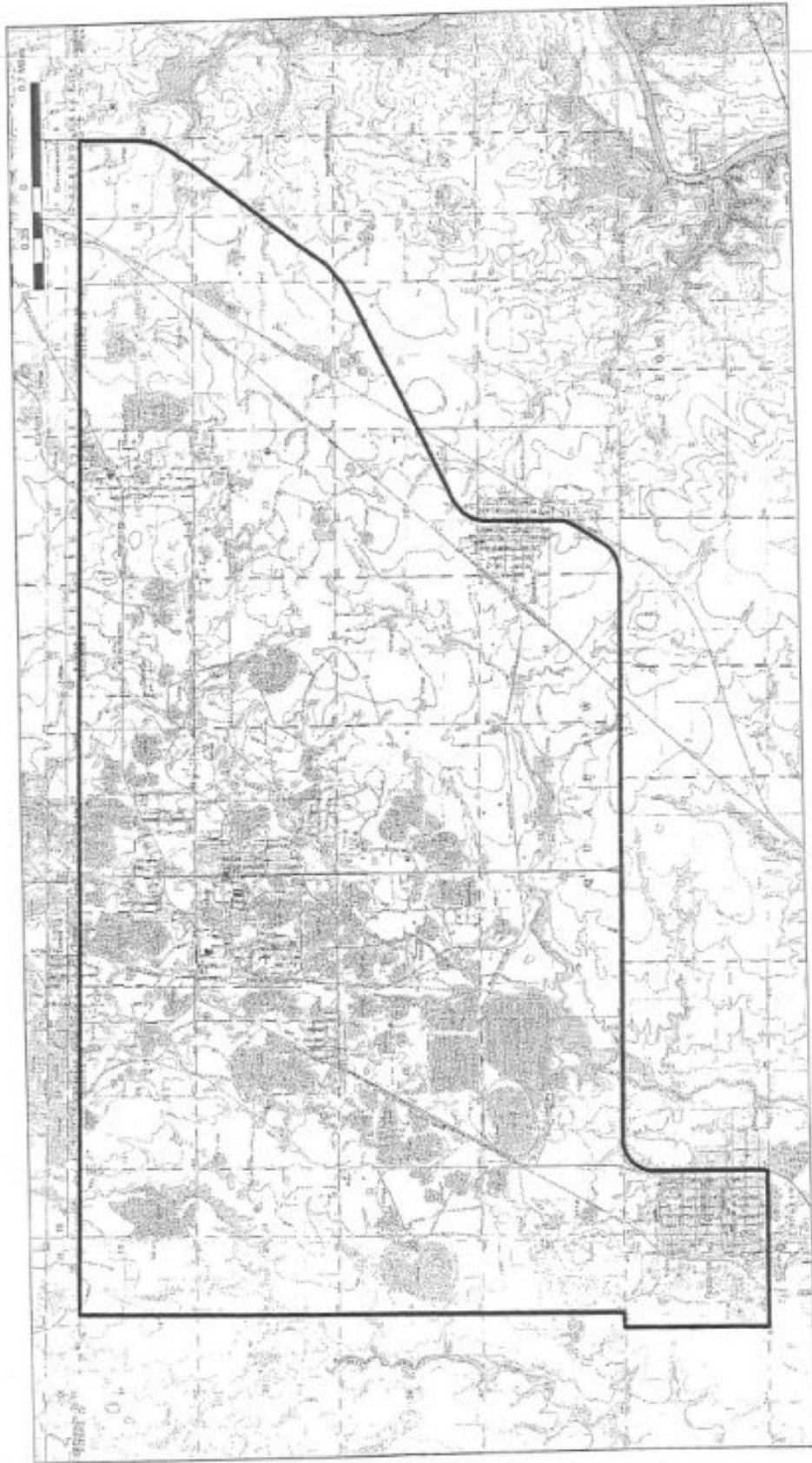
Print/Type Name: _____

Print/Type Title: _____



PA Regarding the Tar Creek/Picher Field Mine Cleanup Project

Attachment A



PA Regarding the Tar Creek/Picher Field Mine Cleanup Project

Attachment B

Case Area Map

Attachment C

Picher Field/Tar Creek Heritage Study

The Picher Field/Tar Creek Heritage Study shall consist of an overview of the history of the Picher Field/Tar Creek project area from prehistoric times to the present, giving considerable emphasis and attention to the theme of the area's history of lead and zinc mining and processing and the related historical subthemes of 1) the history of the Quapaw Tribe's and other tribes' relationships to the Picher Field/Tar Creek project area including the mining; 2) change in mining/processing practices and facilities within the Picher Field/Tar Creek project area; and 3) the growth of towns and communities in the Picher Field/Tar Creek area. The Study will discuss the significance of area's historical themes and subthemes in terms of the National Register of Historic Places eligibility evaluation criteria. In addition, the Heritage Study shall describe property types and their relationship to the historical themes and subthemes and shall provide guidelines to be used in determining the integrity of the historic property types for use in National Register eligibility evaluations.

In a separate appendix, the Heritage Study shall provide 1) a list of at least 30-40 persons knowledgeable of or associated with the history of the Picher Field/Tar Creek area that are recommended for future video/oral interviews, based on consultation with the CRTT, Picher Museum, Ottawa County Museum, Quapaw Tribe, and other local tribes; 2) a list of properties worthy of preservation with ownership information, discussion of historical significance of property, and discussion of recommended preservation; 3) a list of properties recommended for limited field recordation with ownership information, discussion of historical significance of property, and description of recommended recordation; 4) further historical research of the Catholic 40 and preparation of a map to scale showing historic buildings, historical archaeological remains, and historic use areas in relation to areas in need of remediation based on historic maps, informant information, historic photos, and other information (see stipulation VIII of the Agreement); and 5) annotated bibliography of written and audio-visual materials and other sources about the history, mining, and cleanup of the Picher Field/Tar Creek area including information about location and availability of these sources.

APPENDIX C

SECTION 404 PERMIT

Regulatory Guidance Letter 85-07

SUBJECT: Superfund Projects

DATE: 05 July 1985

EXPIRES: 31 December 1987

1. Recently, the Chief Counsel, Mr. Lester Edelman, responded to a letter from Mr. William N. Hedeman, Jr., Director, Office of Emergency and Remedial Response, Environmental Protection Agency (EPA) Which dealt with the need for Department of Army authorizations for the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) actions. This letter summarizes Mr. Edelman's opinion and provides operating guidance for field interaction with the EPA.
2. The EPA's basic position is that Congress did not intend for CERCLA response actions to be subject to other environmental laws. Rather, as a matter of sound practice, CERCLA response actions generally should meet the standards established by those laws. Consequently, it is the EPA's position that neither it nor the states, in pursuing response actions at the location of the release or threatened release under the authority of CERCLA, are required to obtain permits under [Section 404 of the Clean Water Act](#) or [Section 10 of the Rivers and Harbors Act](#) for those actions.
3. Mr. Edelman stated in part that he has some reservations about the position that the EPA has taken. Nevertheless, he recognizes that the EPA has the primary authority for the interpretation and application of CERCLA, and therefore would defer to the EPA's reading of its own statutory authorities, at least for the time being.
4. In light of this legal opinion, FOAs should not require applications for the EPA or state response actions at the location of the release or threatened release pursued under the authority of CERCLA. Any permit applications in process should be terminated.
5. Both the EPA and OCE believe that the FOAs' expertise in assessing the public interest factors for dredging and filling operations can contribute to the overall quality of the CERCLA response action. The Director of Civil Works will be establishing a group from his staff to work with the EPA staff to develop a framework for integrating the Corps Section 10, Section 404 and, if appropriate, Section 103 concerns into the EPA's substantive Superfund reviews.
6. Until specific guidance is provided from OCE, FOAs should provide technical support to the EPA regions and/or the states on matters within their field of expertise.

FOR THE CHIEF OF ENGINEERS:

C.E. EDGAR III
Brigadier General, USA
Acting Director of Civil Works
